

# University News

MONDAY, JULY 27, 1987

Rs. 1.50



Combined Universities Hockey Team which won the second place in the Junior National Hockey Championship held at Lucknow recently.

# **Council of Scientific & Industrial Research**

## **Advertisement No. 3/87**

CSIR is seeking to appoint a Chief Engineer for its Engineering Services Division located at New Delhi. The Engineering Services Division has a staff of around 100 comprising Engineers and Architects and annual budget of Rs. 10 crore. The Division is responsible for the building construction activities in the CSIR and its laboratories. Its main functions are: (i) site inspection and preparation of architectural designs, (ii) structural designing, (iii) estimation and tendering, (iv) site supervision.

The Chief Engineer is the Head of the Division and would be responsible for developing and managing annual budget, day-to-day operations of the Division and man management.

The candidate should be an established Civil Engineer or an Architect preferably below 50 years of age. He should have a demonstrated ability to manage supervise construction works at various sites; a proven record of inter-personnel skills.

This is a contractual appointment for a period of six years in the scale of Rs. 4500-150-5700 plus allowances as admissible under the Central Government rules.

A duly constituted Screening Committee will decide on the number of candidates to be invited to meet the Selection Committee. The decision of the Council in this behalf will be final. Applications from employees working in Govt. Depts., Public Sector Organisations and Govt. funded agencies will be considered only if forwarded through proper channel and with a clear certificate that the applicant, if selected, will be relieved within three months of receipt of the appointment orders. Canvassing in any form and or bringing in any influence, political or otherwise, will be treated as disqualification for the post.

Application forms for the post mentioned above are obtainable (free of cost) from the Joint Secretary (Administration), Council of Scientific & Industrial Research, Rafi Marg, New Delhi 110 001 upto 3.9.1987. The duly completed form together with application fee of Rs. 8,- (Rupees eight only) in the form of crossed Indian Postal Order in favour of Council of Scientific & Industrial Research, New Delhi should reach him latest by 24.9.1987. No fee is payable by Scheduled Caste/Tribe candidates.

# UNIVERSITY NEWS

**VOL. XXV**  
**No. 30**  
**Price**

**JULY 27**  
**1987**  
**Rs. 1.50**

**A Weekly Chronicle of Higher Education published by the Association of Indian Universities**

## IN THIS ISSUE

**Personnel Management  
of Examinations**

**A New Strategy for Financing  
Higher Education** 9

### Convocation

**Bangalore University,  
Bangalore** 17

### News from Universities

**BITS Introduces M.V.S.** 22

**Foundation for  
Educational TV** 22

**Academic Staff College  
for Jodhpur Varsity** 23

**Refresher Course in  
Chemistry** 23

**Bill to Ban Capitation Fee** 23

**Environmental Education** 24

### Agriculture

**Botanical Pest Control** 24

**Summer Institute on  
Surgical Affections** 25

**Additions to AIU Library** 28

**Theses of the Month** 29

**Classified Advertisements** 31

**Opinions expressed in the articles  
are those of the contributors and  
do not necessarily reflect the  
policies of the Association.**

**Editor:**  
**SUTINDER SINGH**

## Personnel Management of Examinations

**N.L. Mishra\***

All types of management desirable for smooth functioning of any organisation may be grouped into two broad categories, viz., the man-management and material-management. Which of these two is more important? Answer to this, perhaps, depends upon the nature of business or function of the organisation. In a university system where most of the jobs, particularly those related to examinations are time bound programmes and thousands and lacs of students are examined every year, naturally, the man-management plays a vital role and as such is more important. Thus while planning for personnel management the following considerations may be kept in mind :

1. Image of university administration is directly linked with the timely commencement of examinations and declaration of results.
2. Examination is always a time bound programme and all its activities are interlinked and inter-dependent
3. Right from registration/enrolment to declaration of results and delivery of degree there are so many jobs which are undertaken to complete the process of examination. It is worth-noting that all the activities, minor or major, are equally important.
4. Regularity of academic session is directly related to the examinations.
5. Any delay in the commencement of examinations and consequently declaration of results may have adverse effects on the future plans of the students.
6. Many external agencies are involved in the examination management.
7. The Registrar or Controller of Examinations has to devote a lot of time in public dealings and meetings, so often held in the university system. Thus a competent supervisory cadre is must in each branch of examination.
8. For completing the job within stipulated time comparatively more manpower is needed to be put on the job.
9. For efficient and smooth functioning, each job has to be organised in a separate branch, section or cell.
10. For each job, work studies should be conducted and average output worked out in terms of manpower and quantum of work ratio

In the light of these facts, it is desirable to have a look at various jobs taken up in the process of examinations. This will give an idea of the variety and volume of work. All the jobs of examinations may be put in two broad groups.

- (a) Jobs of secrecy branch.
- (b) Jobs of conduct (of examination) branch.

### **Jobs of Secrecy Branch**

1. Preparation of panels of examiners, subject-wise.

\*Deputy Director (Admn.), The HCM Rajasthan State Institute of Public Administration, Jaipur - 302 017

2. Conducting meeting of selection of examiners committee and get the paper setters, additional head-examiners and co-examiners appointed
3. To procure acceptance from examiners.
4. Despatching of material for paper setting.
5. Manufacturing of answer-books.
6. Arranging practical examinations.
7. Preparation of lists of examiners (for theory papers) class, subject and paper-wise.
8. Allotment of answer-books examiner-wise.
9. Printing of question papers.
10. Printing/typing of marking instructions for each paper where the number of examiners is more than one.
11. To constitute and detail flying squads to check use of unfair means at the examination centre
12. Collecting answer-books from the examination centres.
13. Despatch of answer-books to examiners.
14. Preparation of programme plan for assessment if it is to be organised centrally
15. Receipt of award sheets.
16. Tabulation of marks by computer or tabulators.
17. Preparation of result sheets.
18. Declaration of results.
19. Clearance of 'RL' (result later) cases.
20. To make similar arrangements for supplementary examinations in all respects.
21. Disposal of cases of scrutiny.
22. Arrangements for revaluation in all respects.
23. Disposal of cases of unfair means.
11. Preparation of basic roll lists examination-wise (manual or computerised).
12. Preparation of numerical returns, examination, subject and centre-wise (Manual or computerised).
13. Preparation and despatch of centre material
14. Preparation of lists of Ex-students who are not supposed to appear in practical examination.
15. Preparation and issue of advance marks-sheets.
16. Clearance of 'RW' (result with-held for the fault of candidate) cases.
17. Preparation of revised marks-sheets (after revaluation).
18. Preparation of duplicate marks-sheets (on demand).
19. Checking of application forms for supplementary examination.
20. Preparation of merit lists.
21. Preparation and issue of migration certificates (on demand)
22. Preparation and issue of provisional certificates (on demand).
23. Preparation and distribution of degrees certificates
24. Preparation and distribution of gold medals.
25. Recognition of institutions for research centres
26. Enrolment of candidates for research (Ph.D./ D.Sc ), appointment of examiners and arrangements for viva-voce
27. Conducting meeting of Research Board
28. Attending queries (verbal or written) regarding various aspects of examinations

### **Jobs of Conduct Branch**

1. Finalisation of examination centres.
2. Appointment of centre superintendents.
3. Printing of stationery required in connection with examinations.
4. Preparation of examination plan (date-wise)
5. Finalisation of dates for submission of examination application forms.
6. Checking of examination application forms.
7. Enrolment/Registration of the candidates.
8. Getting incomplete application forms completed through query/letters (to be sent to the candidates concerned).
9. Preparation and despatch of permission letters to the non-collegiate and ex-students.
10. Preparation and despatch of admission cards.

### **Organisational Structure**

Experience shows that section oriented organisational structure suits the examination management most. In this pattern all the activities are organised through various sections; normally one job/business is assigned to one section. Seating arrangement for whole of the section is made in one room. The Section Officer also sits in the same. Relevant record of the section also is kept in the almirahs of the room. Number of LDCs UDCs and Assistants may depend upon the work load of the section. Thus in section oriented organisational pattern, section is the main, rather key unit where job is actually done. Guidance of Section Officer is readily available to the staff working in the section

Above the section, supervisory officers such as

Assistant Registrars and Dy. Registrars may be there to supervise and control the functioning of sections. Thus the cadre of Assistant Registrar and Dy. Registrar is a sort of link between the actually working units i.e. section and the decision making level i.e. Controller of Examinations of Registrar.

For various jobs taken up in the secrecy and conduct branches, as mentioned in the aforesaid lists, the under-mentioned sections may be organised

#### Proposed Sections for Secrecy Branch

1. Secrecy—I Arts Faculty—UG, PG both
2. Secrecy—II Commerce & Science faculties  
UG, PG both
3. Secrecy—III All professional exams.
4. Secrecy—IV Revaluation and Scrutiny
5. Secrecy—V Unfair means cases
6. Secrecy—VI Printing of question papers
7. Secrecy—VII Secrecy-Miscellaneous such as  
answer-books, etc.

#### Proposed Sections for Conduct Branch

1. Conduct-I PG classes in the Faculties of  
Arts, Commerce and Science
2. Conduct-II UG classes in Arts Faculty
3. Conduct-III UG classes in the Faculties of  
Commerce and Science
4. Conduct-IV All professional examinations
5. Conduct-V Enrolment and Migration
6. Conduct-VI Degrees and Certificates
7. Conduct-VII Research
8. Conduct-VIII Students' Service Centre
9. Conduct-IX Miscellaneous such as station-  
ary, etc.
10. Conduct-X Accounts & cash related to  
examinations

Organisational plan for sections of secrecy and conduct branches, suggested above, is just tentative; actual organisation will depend upon the variety and quantum of work which may vary from one university to the other. If the number of students is much less in a faculty, the same may be clubbed with other section and thus the number of sections can be reduced.

#### Norms for Staffing Pattern

The number of persons to be posted in a section cannot be decided unless there are set norms for staffing pattern. Norms are framed after carrying on

work studies in which average/optimum output per man hour is calculated and thus a set number of staff is suggested for a given work load. In examination management number of examinees is the only scientific basis which can be adopted for the purpose of norms. Norms for staffing pattern may differ from university to university. However, a generalised scale can be taken for the purpose of proper understanding and initiation of work. On the basis of experience some practical norms for staffing in the sections dealing with various jobs of conduct and secrecy branches are suggested.

1. (a) Batch of one UDC and one LDC for every lot of 6000 candidates of U.G. Exam. (Conduct)  
(b) Batch of one UDC and one LDC for every lot of 6000 candidates of P.G. exam. (Conduct)
2. One Assistant for 6 UDCs and LDCs or part thereof.
3. One Section Officer for every two Assistants.
4. One Assistant Registrar for every two Section Officers
5. One Dy. Registrar for every two or three Assistant Registrars.
6. In secrecy section one LDC/UDC for every 5000 candidates
7. For enrolment one LDC/UDC for every 5000 candidates
8. For receipt and despatch one LDC/UDC for every 5000 candidates.
9. For accounts and cash one LDC/UDC for every 4000 candidates.
10. Class IV staff—one for every 10 members of ministerial staff plus one for each officer of the rank of Assistant Registrar and above. With the offices of Controller of Exams. and Registrar two class IV employees may be attached.

Note : The conduct branch deals with the record of each student while in secrecy it is the number of examiners which matters. Thus the workload in secrecy branch is less as compared to their counter sections of conduct branch.

#### Disposal of Files (Delegation of Powers)

University administration is quite peculiar in the sense that all the powers vest in the Executive Coun-

cil or Syndicate, and the Vice-Chancellor is the only competent authority to take decision. Contrary to such a concentration of power, the files, problems, issues and applications to be disposed of particularly those related to examinations are generally so diverse that these can be disposed of expeditiously only when all officers, working at different levels, engage themselves for quick disposal. In such a situation delegation of power is essential. Delegation of powers is one of the recent trends in modern management technique. With this, even the officers working at lower level, develop a sense of responsibility. Confidence and trust reposed in a lower functionaries inspire them to become more responsible. Sense of co-operation, co-ordination and mutual understanding also develops among the officers working at different levels. This is more true in examination management where all activities are interlinked in a stratified manner. Unless first stage is completed the second cannot be taken up. Number of issues and applications to be disposed of is too large and generally in proportion to the number of students and affiliated colleges. Thus for smooth functioning and expeditious disposal of file it is desirable to have a system of delegation of power. A definite scheme for disposal of files at different levels may be chalked out for the purpose.

#### *Norms for Disposal of Files*

In most of the universities there are no set norms for the disposal of work in the administrative office. In absence of such norms there is no check on the movement of files, papers which get unnecessarily delayed and held up at different levels. For the smooth functioning of an office, it is essential to prescribe a time limit for a routine paper to travel up to the stage of its final disposal. This will help in eradicating delays and accumulation of papers at all levels of official hierarchy. Necessity of such a system becomes manifold in examination management where each job has to be completed in given time. Following norms are suggested for disposal of routine and ordinary papers :

<i>S. No.</i>	<i>Level of disposal</i>	<i>Maximum time prescribed for disposal</i>
1.	Cases which are to be disposed of at the level of the Vice-Chancellor.	15 days

2.	Cases which are to be disposed of at the level of Registrar.	12 days
3.	Cases which are to be disposed of at the level of Controller of Exams.	10 days
4.	Cases which are to be disposed of at the level of Addl. Registrar or Finance Officer.	8 days
5.	Cases which are to be disposed of at the level of Dy. Registrar.	6 days
6.	Cases which are to be disposed of at the level of Asstt. Registrars.	5 days
7.	Cases which are to be disposed of at the level of Section Officer.	4 days

The break up of the above norms may be as follows in order of movement of file :

i)	Perusal of mail and its diarising in the Central Registry and disbursement to sectional dealing assistants.	1 day
ii)	Time prescribed to the dealing assistants for putting up the papers.	2 days
iii)	Time for Section Officer to dispose of a file	1 day
iv)	Time for Asstt. Registrar to dispose of a case	2 days
v)	Time for Dy Registrar/ Addl. Registrar to dispose of a case	2 days
vi)	Time for Controller of Exams to dispose of a case.	2 days
vii)	Time suggested for the level of Registrar.	2 days
viii)	Time suggested for the level of Vice-Chancellor.	2 days
ix)	Time for typing and actual issue of order, etc.	1 day

#### **IN-SERVICE TRAINING**

System of in-service training in universities is desirable because of the following reasons :

- (i) In most of the universities there is no system

of foundational courses. It is true in case of all the posts, right from L.D.C. to Dy. Registrar.

- (ii) Lower posts in the university system, say upto the level of Section Officer, are filled in by promotion and not through open competition. This results in the persons who are initially recruited as L.D.C. generally take up the post of U.D.Cs, Assistants, Accountants and Section Officers in due course of time. It is true such persons learn by experience and process of learning goes on from generation to generation. However, there is an inherent weakness of this process. If somebody, by chance, develops an incorrect understanding he goes on with the same for years together and others who learn from him adopt the same incorrect method/understanding.
- (iii) For the posts of officers—Assistant Registrar and above, in most of the universities, system of open competition is there. However, in practice people are taken from inside in most of the cases. Thus the officers too have the same understanding and approach as the lower functionaries. There is no system of fundamental training for officers also.
- (iv) In university system officers and employees are transferred from one branch to another branch frequently. Today one Section Officer or Asstt. Registrar is working in examination branch, tomorrow he can be posted in establishment and next time shifted to Accounts or Academic branch. Thus he is supposed to have fundamental knowledge of all the branches. Ironically, he is not trained for any of these branches.
- (v) The universities are autonomous bodies where the rules are amended and systems are changed frequently. After each meeting of Syndicate or Senate one may find something new. It is, therefore, not only desirable, but necessary that such amendments are incorporated from time to time and implemented properly. For proper implementation it is necessary that the officers and employees who are actually supposed to implement the decisions, have the proper knowledge.
- (vi) It is true that the universities are autonomous bodies. However, as far as non-teaching

staff is concerned, in most of the cases, service rules of concerned State Govt. are invariably followed in the same or in some modified form. Thus to have a clear understanding of the service conditions and rules, prevalent in the Govt., it is desirable to organise in-service training programme.

### Planning for Training

While organising in-service training programmes it may be kept in mind that the programme is meant for the persons who are experienced people and working in the field for the last so many years. Thus it is advisable that the programme may be given a shape of in-service training-cum-workshop where trainees are provided sufficient time for discussions and for removing practical difficulties faced by them in their day to day work. Duration may be a week



## UNIVERSITY NEWS

A Weekly Chronicle of Higher Education

### Subscription Rates

	Inland	Foreign	
	Rs.	Air Mail	Surface Mail
1 Year	60.00	US \$ 60	US \$ 30
2 Years	100.00	\$ 110	\$ 55
3 Years	150.00	\$ 160	\$ 80
5 Years	200.00		

[Teachers and Students in India Rs 40.00 per year]

Subscription is payable in advance by Bank Draft only in favour of Secretary, Association of Indian Universities.

Advertisement tariff available on request

Address Subscriptions & Enquiries to :

Under Secretary (Publications)  
**Association of Indian Universities**  
 AIU House, 16 Kotla Marg  
 New Delhi 110002

or so. Timings may be kept in such a manner that their routine work does not suffer much. Afternoons of the week may be allotted for the purpose. Faculty may be arranged from within the university or from outside also, if need be, but the persons who are selected for this job should be experts in their respective fields.

Most important aspect of the inservice training-cum-workshop programme is selection of the areas to be discussed. For this purpose the whole non-teaching staff of the university may be grouped into three categories.

- (a) Officers—Assistant Registrars and above
- (b) Section Officers.
- (c) Lower functionaries such as UDCs, Assistants, etc.

Thus while deciding areas for training-cum-workshop it has to be kept in view that the trainees are really benefited and their knowledge and efficiency increases. They should, after participating in the programme, feel themselves better equipped and knowledgeable to discharge their duties. Obviously, the nature of jobs performed at different levels will provide base for selection of subjects. For officers not only the knowledge of business (jobs) but also the behavioural aspect is important. They should have quality of leadership, power of decision making and art of administrative communication. A Section Officer has to look after his section and is required to have better co-ordination with his fellow workers. Then and then only, he may expect proper co-operation from them. At the same time he is supposed to have thorough knowledge of his job. For lower functionaries, actual practice of the job is required. This is the level where people are supposed to do the job by hand. Thus they should have practice of doing things. For this level not only the theoretical training but also the practical exercises are desirable. Such practice may be arranged with the same forms, statements, stationery, etc. which are actually used by them.

In short, for all the three categories of non-teaching staff, following areas may be taken up for the purpose of inservice training-cum-workshop.

#### **Areas for Discussions at the level of Assistant Registrar and above**

- (i) General financial management and control.

- (ii) Purchase and stores keeping.
- (iii) Management of examination record.
- (iv) Personnel management in examinations.
- (v) Functioning of examination secrecy branch.
- (vi) Functioning of examination conduct branch.
- (vii) Disciplinary proceedings.
- (viii) Leadership
- (ix) Administrative communication.
- (x) Motivation and behaviour.

#### **Areas for Discussions at the level of Section Officer**

- (i) General financial management and central.
- (ii) Office procedure.
- (iii) Management of examination record.
- (iv) Stores-verification and weeding out old and obsolete records.
- (v) Functioning of examination secrecy branch.
- (vi) Functioning of examination conduct branch
- (vii) Disciplinary proceedings.
- (viii) Personnel management in examination sections.
- (ix) Administrative communication.
- (x) Leadership
- (xi) Co-ordination and co-operation.

#### **Areas for Inservice Training of Lower Functionaries**

- (i) Office procedure and filing system.
- (ii) General financial rules.
- (iii) Management of examination record.
- (iv) Functioning of secrecy branch—Theory & Practice.
- (v) Functioning of conduct branch—Theory & Practice.
- (vi) Stores—Maintenance and weeding out of old and obsolete records.
- (vii) Service conditions.
- (viii) Communication (with students and other visitors).
- (ix) Student service.

## Recruitment

Practices prevalent in most of the Indian universities with regard to recruitment of non-teaching staff are asunder :

- (a) The lower posts upto the rank of Section Officer are filled in by promotion. Thus employee is initially recruited as L.D.C. or Steno-typist.
- (b) The posts of officers such as Assistant Registrar, Dy Registrar, Additional Registrar, Controller of Examinations and Registrar are filled in through open selection but without any written test.

If a survey is conducted, it will be revealed that most of the Assistant Registrars and Dy. Registrars working in the universities are promotees; they started their careers as L.D.C. or U.D.C. By the time they become officer they are almost spent forces. Neither they are open to new ideas nor have guts to face challenges, their jobs demand. Such persons also lack qualities of leadership, motivation and administrative communication. In fact, because of their past positions they are unable to develop confidence and find themselves in a position of helplessness whenever they are required to command a situation other than normal. Because of their long association with the staff at different levels and also to some extent on account of their inherent weaknesses they cannot enforce discipline. Thus the non-teaching middle order officer is the weakest link of the university organisation which needs immediate attention of the university administration. The system that there is open selection for every post in the officer cadre is also not desirable. It is surprising that one who has worked as Assistant Registrar for 10 years is required to face a fresh selection board to become Dy. Registrar. This does not seem to be a sound policy. A direct recruit as Assistant Registrar should get automatic promotion as Dy. Registrar after a definite reasonable time.

Keeping all this in view it is desirable that there may be University Non-teaching Service Selection Board. Such a board may be constituted by University Grants Commission at national level or if need be at regional levels. The Board may be constituted on the pattern of Public Service Commission. If it is not possible services of State Public Service Commis-

sion may be utilized for the purpose. Age limits and qualifications may be kept on the pattern of other services of similar stature. There should be a written test followed by interview. A panel of successful candidates may be prepared. Out of this panel, persons may be posted in various universities. Initially the officers selected by the Commission may be appointed as Assistant Registrars. For higher posts there should be system of automatic promotion. Such a system will definitely help in removing all the weaker aspects of the non-teaching officers of the universities.

For lower posts each university may have its own selection committees. Initially recruitment may be done for the lowest post i.e. L.D.C. or Steno-typist. Written test, type test and interview should be properly conducted for selecting a candidate. For further promotion on higher posts such as UDC, Assistant or Section Officer there may be two criterion:

- (a) To qualify the efficiency test which may be in the form of a written test prescribing exercises on office work.
- (b) Outstanding annual performance reports for the last five years.

This system may help in improving the standard of efficiency at the lower levels.

## Annual Performance Appraisal

While finalising system of annual performance appraisal and the scheme of Reporting and Reviewing officers of various categories of non-employees, some vital key points related to university system should also be kept in mind :

- (a) That a university is a close circuit as far as transfers are concerned. Transfers are there but these do not imply the spirit of transfer. Thus the university employees work at the same place in the same office for decades, sometimes, even more. In such a long period personal equations of both type-positive and negative, may develop with the fellow staff.
- (b) That a university is also, more or less, a close circuit as far as entry to outsiders (in non-teaching sections) is concerned. The number of such persons may be only 2%—3% and

that too at officers level. At lower levels it is completely a close door system. proforma.

(c) That in various branches, particularly in examinations, there may be persons who may be occupying the same seats for the last 15-20 years. Thus their efficiency is bound to be far more as compared to those who have been or are transferred frequently.

(d) To make the system of Annual Performance Appraisal a success Objectivity is essential. For achieving such objectivity it is desirable that no officer should remain on one seat for more than three years. For lower functionaries this duration may be five years.

(e) That most of the universities do not have any system of performance appraisal so far. Thus in the initial stage, say for 3-4 years, the system of Annual Performance Appraisal should be introduced in such a way that the affect of the aforesaid situations is minimised.

The format of the Annual Performance Appraisal (proforma) may be designed in such a way that it may have three parts to be filled in by three different persons as mentioned below. It should be a simple

- Part I — By the employee concerned  
Part II — By the reporting officer  
Part III — By the Reviewing officer.

The reporting and reviewing officers in respect of various categories of employees may be asunder.

It may be noted that an officer higher than the immediate senior one, has been suggested as reporting officer. Needless to mention, it is because of special circumstances prevalent in the University offices as analysed in the previous paragraphs.

As regards the performance report for class IV employees, it may be reported by the concerned Section Officer or any other officer of equal or higher rank under whom the employee has actually worked for sufficient time. The step of reviewing is not necessary in the case of class IV employees.

The Annual Performance Appraisal should be initiated within 30 days from the closing date of year. If, however, an employee does not submit his performance appraisal in time, the reporting officer himself should initiate the APA and forward it to the reviewing officer. The minimum period for the purpose of reporting on performance may be six months or so. ☐

S. No.	Category of Employee	Reporting Officer	Reviewing Officer	Accepting Officer
1.	LDC/UDC	Section Officer (S.O.)	Asstt. Registrar (A R.) Dy. Registrar (Estt.) (D.R.)	
2.	Asstt/Accts.	A.R. (in consultation with S.O.)	D.R.	-do-
3.	S.O.	D.R. (in consultation with A.R.)	Registrar	-do-
4.	A.R.	Registrar (in consultation with D.R.)	V.C.	Registrar
5.	D.R.	Registrar (in consultation with Addl. Regr./Controller of Exams (C.E.)/Finance Officer	V.C.	Registrar
6.	Addl. Regr./C.E.	Registrar/V.C.	V.C.	Registrar

# Wanted : A New Strategy for Financing ✓ Higher Education—II

K.K. Balachander\*

## Contributions from other (Private) Sources

The second way of augmenting resources for development of higher education is to make increased efforts for attracting private contributions, donations, endowments, etc. This source has been drying up quite rapidly, and it needs to be stimulated and revived, especially through the strengthening of college/university-community relationship. In the earlier periods of university/college education, munificent private donors took active interest and initiative in the establishment of higher educational institutions, and financed them liberally. In fact, such financial support had enabled these institutions to retain their independence to a great extent. The following measures will go a long way in encouraging the flow of such private funds to the higher education sector :

(i) If donations have to be activated, the 'net gains' to the supplier of donations must be raised significantly and the 'price' of acceptance of donations must be reduced substantially (Panchamukhi). The former suggests attractive tax reliefs/concessions to individuals/organisations/industries for donations made to higher education; the latter suggests acceptance of donations which are, as far as possible, unconditional so that the university/college can retain its autonomy. In fact, private organisations/enterprises, and even households, should obtain 100 per cent tax relief for the contributions that they make towards investments in education, particularly in the spheres of higher professional/technical education.

(ii) There is need for a better industry-academic institution interaction or interplay. Some efforts have been made recently in this direction but these do not appear to be quite effective. Substantial institutional and attitudinal barriers still exist to enter into such a relationship, and these have to be surmounted. The potential benefits on both sides are immense and they can enhance each others' mission. The universities, for example, have ideas and need money; the industry has money and needs

ideas. This will also help the academic institutions which have come under heavy financial pressures in recent times, in obtaining assistance for replacement of obsolete scientific instruments and equipment that are invariably found in the laboratories of many of them, and for building up of their libraries. The cost of such items is rising faster than government can fund now. Besides, this sort of an arrangement will encourage better university industry participation in designing higher educational programmes in the emerging new fields and professions, and exposure of students to them, thus enabling the latter to gain enormous confidence when employed in industries. It is the experience now that many candidates with technical/professional qualifications find it difficult to make a favourable impression at the time of their employment in the industry, because of lack of practical experience/training. This can be rectified by giving training to students in areas as required by the industries. Industry could also be involved in curriculum development for certain specialised fields so that a more meaningful syllabus could be framed. The expert staff working in industries could be associated with universities by inviting them for special lectures or as Visiting Professors, which some of the Management Institutes are doing now. Also as faculty salaries lag behind some other professional compensation, the possibility of receiving a share in consultancy income from industry becomes more important in recruiting and retaining teachers in many fields.

An ideal area of collaborative effort between university and industry is advanced research. According to Schultz, among the most important educational activities that render social benefits, university research is in substantial part one. The case for research, which is associated with higher education needs to be discussed perhaps in greater detail as it provides a strong argument for university-industry partnership. No country has a chance of entering the modern technological world without Research and Development organised on a large scale. The rate at which new ideas and new techniques of production can be embodied in physical capital determines the rate at which the economy as a whole can advance. This then, as Vaizey also put it, is one

\*Secretary-Technical Coordinator, ULP, Department of Economics, University of Bombay, Bombay-400 098.

clear contribution which is made by higher education to economic development, because it is from universities (and research establishments) that new ideas and techniques flow. Because certain kinds of basic research is done in universities (such as bio-technology, environmental systems, energy etc.) the industry does not have to add to their own research budgets to get into these fields. Research and development activities have therefore many links with higher education: they are inextricably intertwined as Marshall's 'knife-blade and handle'—perfectly complementary. It is now realised that much of the research is the outcome of team work, the great bulk of which is being carried on in universities. Research-oriented universities are among the major contributors to the advancement of knowledge in advanced countries. They not only play the role of providing a continuous flow of research results but also supply the highly skilled personnel needed for R & D activities in other sectors. The universities can be a convenient mechanism for discovering and cultivating potential talent, and at the same time provide a congenial atmosphere for conducting research in those areas that will foster civil, cultural, technical and scientific progress. Their role has also been enhanced because of the complementarity between teaching and research. The private companies/corporations in advanced nations had extended, and continue to extend, liberal financial assistance to universities to conduct research in many disciplines, including Humanities and Social Sciences. In fact, the universities faculty in Western countries prefer such funding today precisely because industry frequently offer its support with less control and far less red tape than they have experienced under Government grants.

Perhaps a consortium of business donors can get together to support higher educational programmes. If only one company supports such services, it may have to bear costs that are disproportionate to its benefits. The company may also feel that its contribution will make little difference to the overall future of the service in question. A collective effort will, therefore, be a good solution.

The Government should extend its cooperation in fostering university-industry collaboration by providing all incentives and removing such disincentives inhibiting this kind of interaction. Certain guidelines and mutual guarantees will of course have to be framed for such collaborative arrangement, e.g. protecting the freedom of the academic staff to choose the direction of research, the commitment of both the parties to academic values and the good of the

public, etc. Also the teachers should not be treated as employees of the industry.

(iii) There are many other untapped small contributions that the local community can make to the higher educational enterprise, which the example of the successful efforts made in Tanzania highlight. With a proper machinery and good public relations, such resources, though small, can be mobilised.

(iv) Another untapped source of finance is the charitable institutions/trusts and religious institutions. Some of them are already engaged in educational activities, but such efforts need to be properly channelled and encouraged through appropriate fiscal measures and concessions.

(v) Institutions like the LIC, the IDBI, the IFCI, and other financial institutions may extend grants to certain specific academic programmes in universities or creation of chairs in specialised fields.

In short, a new approach to resource-mobilization by universities/colleges is urgently needed. The conventional assumption that only Government can alleviate the financial crisis faced by the higher educational sector has to be overcome as it is becoming increasingly obvious that this overdependence is neither feasible nor desirable. The institutions appear to be too willing to accept the funds that are provided by the Government, and not worrying about the consequences of this largesse. So long as they can be seen to derive most of their incomes from governmental sources, the inducement to private individuals/organisations to come forward with financial support is impaired. If the institutions cast away their apathy and reluctance and go in a big way to mobilise new and unconventional private resources (including the help of their alumni) further deterioration of their financial condition can be averted. It would also help them, particularly the universities, to redeem their autonomy, as they will be subjected to less and less Government attention in financial matters. Sincere efforts have to be made, both by the institutions and the Government, to educate public opinion on the urgent need for raising more private (non-governmental) resources for higher education. The institutions have so far been not successful in creating among the community an awareness of the constraints, pressures and challenges being faced by them. Sustained efforts should, therefore, be made to establish a closer rapport with the community instead of the institutions living in an environment of exclusiveness. The only assurance that they have to offer

to the community is that they will exert their maximum to get most out of the resources by optimum use, introduce cost-saving measures and avoid all institutional extravaganza. Unless the community is convinced that the funds provided by it are being utilised in the best possible manner, and the college/university affairs are being conducted in an integrated meaningful, fair and efficient manner, it will not volunteer with help. In short, the institutions must show that they deserve public trust and support. For this, how the institutions function within is very important. As Madhuri Shah had rightly observed, "what we need in our higher educational institutions, especially universities, today is more of calm thinking, more of thinking together, more of purposeful thinking, more of breaking wits instead of breaking heads...."

### Looking Ahead

Higher education in India has been passing through a critical period. Its ill-health has been causing grave concern to all. So far its planning has been concerned with expansion. The Government has now, though belatedly, recognized the implications of faster expansion, especially on the financial front. The UGC in one of its Policy Frame Documents, had described the situation thus: "The system of higher education is now in a state of crisis due to uncontrolled and unplanned expansion— inadequate inputs in terms of money, materials and talents, falling standards in a large proportion of institutions, weakening of student motivation, increase of educated unemployment etc." There is not just a single crisis; there are several crises, all closely related to one another. No single panacea can, therefore, bring about a change in the situation; several options need to be considered. As a first step, however, clear policy decisions on the following fundamental issues—which have not received adequate attention so far—are very essential:

- (a) What should be the future policy with regard to expansion of higher education? Should the enrolment-targets be broadly adjusted to national needs.

The demand for higher education is based more on individual desire, due to many reasons. In some countries, including developing ones, Governments have set ceilings on admissions to colleges/universities with quota reserved for depressed groups. National examinations have been instituted to regulate

admissions. The New Education Policy on Education (1986) has stated that "as far as higher education is concerned, "in the near future, the main emphasis will be on the consolidation of, and expansion of facilities in the existing institutions". The principle of giving precedence to 'quality' over 'number' should help restore some health and vigour to the higher education system which looks perniciously anaemic at present. Qualitative improvement in higher education constitutes the essence of human resource enrichment; this issue naturally acquires an immediacy. Increasing efforts will have to be made to diversify the structure of education through non-university/vocational education wherein the success to date has been minimal. This is exacerbated by the differences in employment prospects and rewards which students of the two streams obtain in the country.

- (b) With regard to financing of higher education, the questions that arise are how much higher education is going to cost say in the next 15 years, where the resources are going to come from, and if the Government resources are inadequate to meet future development, what are the alternative strategies of financing that can be adopted? Should the present situation wherein the Government is gradually replacing the fast declining private (non-governmental) contributions and the whole system being turned into almost a totally Government-financed one—with its adverse consequences on the institutions, especially the state universities—be allowed to continue in the same manner? And should the large gap between expenditure and fee contribution—which is found to be wider especially in the case of some Professional/Technical categories of higher education (wherein a substantial number of those who received training could acquire markedly higher earnings later either in the country or outside) be retained, or should there be a closer alignment between the expenditure on higher education and the fees paid by students? In other words, should the fee structure which has remained static for a long time be reviewed so that students pay a reasonable proportion of the actual expenditure incurred on them—say 45-50 per cent of the direct expenditure which was the share of fee contribution in direct expenditure in 1947-48? Should

the Government ask those students from outside India to pay a higher rate of fee as many other countries are doing? This has become relevant now as an increasing number of students from other countries are taking advantage of our higher education system.

Some alternative strategies of financing higher education have been suggested by experts in the field, but these proposals have not received due attention. If a serious debate could be started in this direction soon and the public is made aware of the alternatives that are open the different aspects of the problem would become much more clearer than what they are now. The public gets educated not by presenting one alternative strategy, but a set of alternatives—say three or four—and, then the choice be left to it. There however appears to be a general agreement, at least among economists, for rationalising the fee levels and fee structure (with adequate scholarships and fee remissions for needy (and deserving) students) particularly at the graduate (plus three), honours and post-graduate levels and professional technical categories of higher education where the employment/self-employment opportunities are better and the private gains are relatively high.

- (c) Should the subsidy be extended to all uniformly regardless of their capacity to pay, especially when we take into account the facts that (i) the country is characterised by highly unequal distribution of income, and (ii) it is the people with a favourable socio-economic background who have taken advantage to a large extent of the existing provisions of higher education (forming nearly two-thirds of the total enrolment)? Or should the programme of subsidy be implemented in such a manner that there is some positive discrimination in favour of the low-income group of students who have a natural aptitude for higher education so that poverty shall not be a bar to their educational advancement?
- (d) What should be the respective roles of the Union and State Governments in the development of higher education in the country as a whole and in the different States which are at different stages of higher educational (and economic) development? What are the types

of aid needed from the Centre to equalize higher educational opportunities and thereby increase 'the pool of talent' available for national development?

As education is now a Concurrent subject, the Union and State Governments will both have a say in the matter. This also brings in the question of proper coordination and demarcation of the responsibility between the major fund-giving agencies—the Planning Commission, the UGC and the State Governments—and between the last two and the higher educational institutions. In fact, a large number of the financial ills and non-achievements of the desired results could be traced to lack of proper coordination between the above fund-giving agencies. While the development of higher education has to proceed separately in each State in a manner best suited to local conditions, the Central Government has a direct responsibility and positive role because the Constitution has made "Coordination and Maintenance of standards in higher education" a Central subject. Special Central financial aid should be provided to equalize higher educational opportunities as between people in relatively rich and relatively poor regions. Such a system of differentiation is conducive to the development of the reserves of talent to be found in backward regions.

- (e) Is there scope for further tapping of resources, other than the Public Exchequer and fee contributions, to finance higher education—say private benefactions, religious trusts, financial institutions, the industrial (and agricultural) sector, etc.? Should donations, gifts, etc. to educational institutions be exempt from income-tax subject to safeguards?

The Document **Challenge of Education** has suggested that besides raising more resources through increased fees, raising resources through community subscriptions and contributions from development departments and others using the manpower output of higher education needs serious consideration. It has also suggested that the users of technical manpower should be made to pay a cess on the profits to support technical education. Also the recommendations made by the Seminar on 'Financing of Education' held

under the auspices of the Madras Institute of Development Studies (October 1985) in this regard merit serious consideration.

- (f) If the available resources are likely to limit further development of higher education, is it not essential to get most of such resources by optimum use? What are the areas of higher educational activity from which adequate returns are not made at present? What measures should be adopted to plug the loopholes so that the system can be made more efficient and productive?

In fact some of the crucial reforms need very little monetary investment. A country not well endowed with funds has to ensure that resources are properly used and that the best possible returns are obtained. If ushering in the new technologies is the goal, then, development of human potential to meet the challenge becomes the aim of educational administrators. That is, the broad financial efforts need to be further divided into their finer components. The benefits in financial terms as measured by skill enhancement, contribution to development or any other factor, in each line, may be correspondingly worked out. We will then be able to obtain a benefit-cost matrix which will give us the interactions involved and also the rate of benefit in each line of higher educational investment. Especially since the resources are scarce (having a number of alternate uses), there is a continuing need to discover the benefits of different lines of action, and see that the resources flow into appropriate channels.

- (g) What are the main shortcomings of the existing system of financial administration, both at Centre, State and institutional levels, and how can they be overcome? Whereas there may be many factors responsible for the present state of affairs, educational administration cannot escape its own share of the blame. It is an admitted fact that the administrative machinery, both at Central and State levels, still suffers from many drawbacks. It continues to be static and refuses to change. It is extremely niggardly in their approach to the basic needs of higher educational institutions. In short, these institutions are forced to fit themselves into the strait-jacket tailored by the Government. The emphasis appears

to be more on 'regulation than development'. Such an attitude has an adverse effect not only on the implementation of academic programmes but also on the quality of the programmes themselves. The chasm between policy formulation and implementation remains too wide. There is a total lack of appreciation of the real role of higher education and that, more than else, accounts for the casual treatment meted out to universities/colleges. In short, there is hardly any interaction between the University/College authorities and officials in the Education Ministries at State-level. There has to be a change in the present set-up.

All these questions assume special significance in the present context of rethinking by policy makers and educationists on the existing design of the educational system in the country. The need of the hour apparently appears to be the formulation of a comprehensive strategy for the development of higher education, separately, and the same may be introduced in a phased manner during the next five years. Perhaps a joint committee of representatives of the UGC, the State Education Departments and the universities and other institutions may study the problem of resources for higher education and work out a strategy for mobilising them. There is some kind of a chaotic situation existing in many States with regard to the financing of higher educational institutions, especially in the case of the state universities. Instead of looking upon the maintenance and development of the state universities as just the business of the States concerned, the Central Government should pay more attention to their financial needs. This, more than anything else, could help strengthening the health and vigour of university education all over the country. For this, the UGC should be associated more effectively in its capacity as an advisor to the State Governments on enrolment policy, determining the question of maintenance grants, and even on fixation of fee rates. The UGC Act has recently been amended, and the Commission has been given the power to regulate fee structure, coursewise, but it has yet to exercise it. If armed with more funds and staff, the Commission can succeed in this direction. As a first step, the Commission should undertake a review of the working of the state universities on the same lines as was done in the case of central universities a few months ago. Questions like whether these universities are making enough efforts to mobilise their own finances, whether the resources allocated are optimal, and within the

institutions itself, whether the allocation among the different departments is optimal, whether the resources are being utilised efficiently and economically, whether there exist economies of scale to be realised, etc. will naturally arise while undertaking such a review. With such an approach, it will be possible to analyse various aspects of financing of state universities which form an important part of the university system in the country—covering nearly 96 per cent of the enrolment (in university departments and affiliated/constituent colleges)—and to develop some general principles of resource-mobilisation and resource-utilisation.

This is the appropriate time to clearly identify the instrumentalities of achieving the overall goals of higher education in the mixed economic set up, and decide in advance, explicitly, the proper weightage to be given to each one of them. In other words, questions like what should be the role of direct control of enrolment and development of higher education through variation in fees, or grants-in-aid, or in the fiscal incentives for donations to higher education etc. would assume great policy significance. A substantial portion of the income of a teacher should come from the fees that can be garnered from students. The wonderful effect of income upon attention and energy which Adam Smith remarked over two centuries ago, could ensure a new level of academic performance in universities colleges. It will be a welcome relief to budgetary resources if the non-governmental sectors, including students parents commit themselves to a bigger share of the expenditure. Fees could be conceived not merely as a source of finance, but also as an instrument of policy for allocation of enrolment into different lines in accordance with the future manpower requirements (Panchamukhi, P.R. The pressure for *status quo* will no doubt be there, but it has to be overcome by educating public opinion and considerable political persuasion. It is the responsibility of no government to help all students become graduates almost free of cost. The Indian Constitution itself has prescribed compulsory free education only upto a certain level. To go far beyond this is not only uncalled for but is also, in the long run, against the interests of the students themselves.

All this would of course call for bold decisions and radical departures from earlier strategies, conventions and established procedures/rules relating to the growth and financing of higher education, but they will go a long way in putting higher education back on the rails and helping it reach its destination (goal). It is high time an attempt is made to strengthen the

institutions that have already come into existence, to enable them to function in peace and help them to grow as excellent centres.

The financial crisis in the higher education sector is too deep and cannot be handled through a series of *ad hoc* actions. Before it is too late, some permanent measures be taken for growth and financing of higher education, within the prescribed economic and other limitations. This in turn will also require massive strengthening and sweeping reorientation of educational research. Unless some bold and new steps are taken, the higher education sector will drift into further chaos and ultimate collapse. The Prime Minister has made a firm commitment to the transformation of Indian educational system, and the Government has already formulated certain policy-guidelines towards this end. This is a unique opportunity for our educational planners and policy makers to recognize the major constraints and work with a new zeal and dedication for a more efficient and equitable system. It is an arduous task, but is feasible operationally. □

#### REFERENCES

- Azad, J L, (i) Financing Institutions of Higher Education in India: The Need for a Realistic Fee Policy", *Higher Education* 5 (1976), 1-7 (ii) "Educational Finance in India: Progress, Problems and Perspectives" Special Number on Education and Implementation, *The Indian Journal of Public Administration*, Vol. XXXI, No. 3, July-September, 1986
- Balachandran, K K, (i) *Government Grants and Higher Educational Development: with special reference to Indian Experience since Independence* Ph.D. thesis University of Bombay, May 1985 (to be published shortly), (ii) "Justification for Public Expenditure on Education" (Monograph), University Leadership Programme, Department of Economics, University of Bombay, June 1985, (iii) "Higher Education: A New Strategy Needed", *Economic Times*, June 13, 1986, (iv) Salvaging Higher Education: New Challenge", *Southern Economist*, Vol. 25, No. 6, July 15, 1986, (v) "Higher Education in India: Quest for Equality and Equity", *Mainstream*, August 2, 1986, and (vi) "Government and Higher Education: Need for a Realistic Grant", *Economic Times*, Dec 18, 1986, and (vii) "Resources for Higher Education: The Role of Different Sources and Their Dynamics", Paper presented at the J.P. Naik National Seminar, 1986-87, Indian Institute of Education, Pune, Sept., 1986.
- Bharadwaj, R and Balachandran, K K, "Planning and Administration of Higher Education: The Missing Perspective", *Journal of the University of Bombay*, (Arts) Number (to be out shortly).
- Blaug, Mark, (i) "The Overexpansion of Higher Education in LDCs—And Its Remedy", Paper submitted to the Rehovoth Conference on Economic Growth in Developing Countries, September 1973, (ii) "Economies of Education in Developing Countries", *Third World Quarterly*, Vol. 1, No. 1, Jan. 1979.

- Brahmananda, P.R., (i) "A Quasi Empirical Approach to Higher Education", Paper submitted at the National Seminar on Higher Education, JNU, N. Delhi, 14-15 Nov. 1985; and (ii) "Financing New Goals in Education", Paper presented at the National Seminar on Financing Education, MIDS, Madras, Oct. 1986
- Edding, Friedrich, "Student Aid—Concepts, Objectives and Methods", in *Financing of Education for Economic Growth*, OECD, Paris, 1964
- Friedman, Milton, "The Role of Government in Education" in the author's *Capitalism and Freedom*, University of Chicago Press, Chicago, 1962.
- Gore, M.S., "Financing Higher Education", *University News*, June 1, 1986.
- India, Ministry of Education, *Challenge of Education—A Policy of Perspective*, 1985
- India, Ministry of Human Resource Development, *National Policy on Education—1986*.
- Israncy, S.M and Balachandran, K.K., "Economics of Higher Education: Current Trends and New Priorities", *University News*, November 8, 1986 (Special Number)
- Jimenez, Emmanuel, "The Public Subsidisation of Education and Health in Developing Countries: A Review of Equity and Efficiency", *Research Observer* (World Bank), Vol. I, No 1, Jan 1986.
- Kothari, V.N., "Factor Cost of Education in India", *The Indian Economic Journal*, Vol XIII, April-June, 1966
- Lakdawala, D.T., "New Horizons in Educational Planning", *Yojana*, Vol XXII 12 July 1, 1978
- Lyons, Raymond, "Economics of Education" in Ferning, Leo and Bowen James (Ed), *Twenty-Five Years of Educational Practice and Theory, 1955-1979*, International Review of Education, Jubilee Volume, Martinus Nijhoff Publishers, The Hague, 1980.
- Naik, J.P., (i) *Educational Planning in India* Allied, Bombay, 1965, (ii) *Equality, Quality and Quantity, The Elusive Triangle in Indian Education*, Allied, Bombay, 1975; and (iii) *Education Commission and After*, Allied, Bombay, 1982.
- Nanjundappa, D M "Some Critical Issues in Planning and Management of Higher Education," *University News*, June 15, 1983.
- Panchamukhi, P.R., (i) *Economics of University Finances: Basic Principles and Practice*, Centre for Multi-Disciplinary Research, Dharwar, 1977, (ii) "Financing University Education: Some Basic Issues", Paper presented at the National Seminar on Higher Education and the Future, University of Bombay, Dec 1983; (iii) "Alternative Strategies of Financing of Higher Education: The Question of Fees", Paper presented at the J P Naik National Seminar, Indian Institute of Education, Pune, March-April, 1985
- Saraf, S N, "National Education Policy: Dimensions and Dilemmas", J P Naik National Seminar, 1984-85, March 31-April 2, 1985, IIE, Pune, 1985
- Schultz, T.W., "Resources for Higher Education: An Economist's View, *The Journal of Political Economy*, Vol. 76, No 3, May-June, 1968
- Shah, Madhuri, R., "Challenges to Higher Education in a Changing India", 20th A.D. Shroff Memorial Lecture, Forum of Free Enterprise, Bombay, Oct 1985.
- Singh, Amrik and Sharma, G D (Eds), *University and College Finances*, Association of Indian Universities, N. Delhi 1981
- Tilak Jandhyala, B G, (i) "Analysis of Costs of Education in India", Occasional Papers, National Institute of Educational Planning & Administration, N Delhi, 1985, (ii) Educational Finances in India", Special Number on Education Policy and Implementation, *The Indian Journal of Public Administration*, Vol. XXXII, No 3, July-Sept, 1986
- Tilak Jandhyala, B G and Varghese, N.V., (i) "Discriminatory Pricing in Education", NIEPA, N. Delhi, 1985; and (ii) "Resources for Education in India", NIEPA, N Delhi, 1984

## Directorate of Correspondence Courses Himachal Pradesh University, Shimla-171005 ADMISSION NOTICE

HIMACHAL PRADESH UNIVERSITY imparts instruction through CORRESPONDENCE COURSES at undergraduate as well as postgraduate level. The courses have a distinctness of being upto date and reflecting the latest thrusts of the concerned discipline. The Directorate enjoys the status of being a pioneer institution in these subjects in so far as its quality of service and coverage of different sections of community is concerned.

Courses of studies, examinations and the degrees awarded are the same as for campus-based students of the University. Admission for the academic session 1987-88 commences as per schedule given hereunder:—

COURSE(S)	LAST DATE(S)
M.Ed. (One year in two semesters), M.Com and M.A. in Hindi, English, Economics, History, Political Science and Sanskrit (Two years in four semesters each).	Without late fee 5.8.1987 With late fee 20.8.1987
XI & XII classes under 10+2 pattern of Education, B.A. Parts-II and III under old T.D.C. system (one year duration each).	Without late fee 31.8.1987 With late fee 15.9.1987

Prospectus containing detailed information and the admission form can be obtained on payment of Rs. 10/- in cash at the office counter or by remitting Rs. 15/- through IPOs/BD drawn in favour of the Director, Correspondence Courses, H.P. University, Shimla-171005.

**K.P. Pandey**  
Director

UGC Sponsored

**All India Institute on Microcomputer in  
Physics Laboratory**

To be held at the

**Centre for Development of Physics Education**

**University of Rajasthan**

**Jaipur-302004**

Applications are invited from College Teachers from all over the country for admission to "All India Institute on Microcomputer in Physics Laboratory" to be organised by Centre for Development of Physics Education in collaboration with University Science Instrumentation Centre. The tentative dates for the Institute are October 26 to November 14, 1987.

The Institute will consist of formal lectures on micro-computer architecture, DAC and ADC techniques, interfacing of laboratory experiments to micro-computers and data processing. The laboratory work will involve programming and interfacing of APPLE II/BBC Micro-computers. The participants are expected to have prior knowledge of electronics programming.

Travelling expenses to the extent of single first class return railway fare from their place to Jaipur and back will be paid to the participant. Daily allowance admissible as per UGC/University rules may be used for meeting their boarding expenses. Lodging will be compulsory at the place provided for the purpose in the University campus.

A few teachers from Universities and IIT's may also be considered for admission. But they will be required to arrange their expenses from their home institution.

Applications on plain papers giving following details must reach the office of the undersigned latest by August 17, 1987. Academic bio-data with date of birth, current activities related to micro-computer field, availability of micro-computer in institution, whether attended any CDPE institute earlier and any other relevant information. The application should be forwarded by Head of the Institution with the assurance that if admitted to the Institute the teacher will be permitted to attend the same for entire duration.

**S. Lokanathan  
Director**

# Higher Education for All

"There can be no gainsaying that there should be higher education for all, but the system has to be disabused of some of the existing maladies . . . . ." said Honourable Sri Prem Chand Jain, Chief Justice of the High Court of Karnataka while delivering the Convocation Address at the Twenty Second Annual Convocation of the Bangalore University. Justice Jain decried, in particular, the fact that the present system prepares students for non-manual jobs only. Rarely does a person from the rural areas desire to go back and work in his rural settings. The other maladies to which Justice Jain referred to included absence of education in morals and etiquettes as also of courses in citizenship in our curricula. He felt since morals and etiquettes can be taught without any reference to religion, our being a secular democracy should not prove to be a hinderance. Similarly, the introduction of citizenship courses was necessary to introduce the students to the great strides made by our Constitution which has been hailed as an 'epochal document of democracy'.  
**Excerpts:**

Convocation ceremony of these days is reminiscent of the traditional ceremonies held in our ancient universities of Takshashila and Nalanda where it was customary to bid farewell to the students with the blessing: "SATHYAM VADA. DHARMAM CHARA. SWADHYAYANMA PRAMADHA."

This incantation from TAITTRIYOPANISHAD sums up all

of the famous "SMALL IS BEAUTIFUL" observes:

"The essence of education is the transmission of values but values do not help us to pick our way through life, unless they have become our own, a part, so to say, of our mental make-up.

When people ask for education, they normally mean something more than mere training, some-

## Convocation

that the teachers desire of their students—"Speak the truth, do righteous things, never give up your education."

My young friends, graduation is only the beginning of real education. The University merely opens the door wide to enable you to pursue knowledge throughout your life in the best possible way. Education is the key to everything. As E. F. Schumacher, the author

thing more than mere knowledge or facts, and something more than a diversion. May be they cannot by themselves formulate precisely what they are looking for, but I think what they are really looking for is ideas that would make the world and their own lives intelligible to them".

Swami Vivekananda, as you all know, went like a lone voyager to

America, unheralded, and with no assets other than his own faculties and the lessons he learnt at the feet of the master. He captured the imagination of the whole world, by his thoughtful utterances. Regarding education, he said:

Education is not the amount of information that is put into your brain and runs riot there, undigested all your life. We must have life-building, man-making, character making, assimilation of ideas. If you have assimilated five ideas and made them your life and character, you have more education than any man who has got by heart a whole library".

Very, significantly, the Union Ministry has come out with a far-reaching statement of educational policy, entitled, "NATIONAL POLICY ON EDUCATION 1986" with the object of intensifying the "nationwide effort in human resource development, with education playing its multi-faceted role". It has been emphasised that higher education provides people with an opportunity to reflect on the social, economic, cultural, moral and spiritual issues facing humanity and that it contributes to national development through dissemination of specialised knowledge and skills.

Talking of the "Essence and Role of Education" the new policy statement makes it clear that in our national perception, education is essentially for all. It refines sensitivities and perceptions and contributes to national cohesion, a scientific temper and independence of mind and spirit, thus furthering the different goals enshrined in our Constitution.

The new policy statement correctly depicts the aims and

objectives of education and represents the new ethos. It heralds a radically new approach to education at all levels. I need not trouble you with the enumeration of details here. Suffice it to say that it has among other things, laid emphasis on vocationalisation of education, de-linking degrees from jobs in selected areas, providing enhanced support to research in universities and coordinating research efforts of different universities, and for the use of computers as part of professional education, the encouragement of "self-employment" as a career option, and to dis-abuse the TV and other media of the effects of display of violence and promotion of consumerism etc.

My young friends, irrespective of the discipline in which you graduated, please remember that your University education is the result of conscious contribution by your family, the society and the State. As one study has revealed, it requires the equivalent of the value of agricultural produce raised by 150 peasants for one year, to support the university education of a single student for one year. Your achievements and accomplishments in the University should therefore belong as much to the society and to the State as they belong to you. Dr. Rajendra Prasad, the first President of India, gave the purpose of education as "creation, rather than enjoyment or ostentation". Swami Vivekananda has said: "We want that education by which character is formed, strength of mind is increased, the intellect is expanded, and by which one can stand on one's own feet". I am mentioning these facts only to impress the need for recognition of the duties and obligations which the University knowledge has placed on you. In emphasising this role,

I am not suggesting even for a moment that you should literally lead the life of an ascetic or a life of self-abnegation or self-denial. By all means earn well in an honest way and be as comfortable as you can, but always have the interests of the society and the State at heart, and work for the fulfilment of that purpose.

There can be no gainsaying that there should be higher education for all, but the system has to be disabused of some of the existing maladies of which particular mention may be made of the fact that the present system prepares students for non-manual jobs only. Rarely does a person from the rural areas desire to go back and work in his rural settings, once he takes a university degree and becomes accustomed to urban life. Swami Vivekananda says: "The education which does not help the common mass of people to equip themselves for the struggle for life, which does not bring out strength of character, a spirit of philanthropy, and the courage of a lion—is it worth the name? Real education is that which enables one to stand on his own legs". In the words of Dr. Rajendra Prasad, the universities have become something of a blotting paper to soak away all talent from village parts. The position has become worse today. Concentration of industries in urban areas and the hope of availability of semi-skilled or unskilled jobs has led to a mass exodus from rural areas to urban areas and the effects of over-urbanisation are seen all round. In spite of this, it is noticed that educated people are reluctant to choose manual jobs even if they are available in cities. This neglect of manual labour and the lack of dignity of labour does not augur well. John Gardner very pertinently remarks:

"An excellent plumber is infi-

nitely more admirable than an incompetent philosopher. The society which scorns excellence in plumbing because plumbing is a humble activity and tolerates shoddiness in philosophy because it is an exalted activity, will have neither good plumbing nor good philosophy. Neither its pipes nor its theories will hold water."

In the same context, I would like to give some excerpts from the report of the International Commission on the Development of Education submitted to UNESCO in 1972:

"Educational action to prepare for work and active life should aim less at training young people to practice at a given trade or profession than at equipping them to adapt themselves to a variety of jobs, at developing their capacities continuously, in order to keep pace with developing production methods and working conditions. It should help achieve optimum mobility in employment and facilitate conversion from one profession or branch of a profession to another."

The position in India, however, is that holders of degrees in humanities and science are mostly after Government service, as they feel that it gives them job-security, in addition to handsome salaries. Equally sought-after are the posts in public corporations, particularly the posts with higher brackets of income and perquisites. Since the present system of education does not equip the students for diverse type of jobs and situations, but only white collar jobs, all students taking up non-technical courses seek white collar jobs only. I am sure that as proposed in the National Policy of 1986, if degrees

are delinked from jobs (in selected areas, not requiring academic expertise), the present trend may be reversed and the indiscriminate rush to university courses may be halted.

Further, two things are sadly missing from the curricula in college studies. In most of the western countries, religious teaching forms part of the studies, which will also take care of educating the student in morals and etiquette. In India, probably for the reason that we are a secular democracy, morals and etiquette do not figure among the subjects taught. But since they can be taught without any reference to religion, I hope that this matter will receive due consideration.

Moreover, the absence of a citizenship course for students other than those studying political science or law, has virtually kept many students ignorant of the great strides made by our Constitution which has been hailed as an epochal document of democracy. Particularly, the Preamble, the Directive Principles of State Policy and the Fundamental Duties have been so vividly expressive of human desires and aspirations, that they deserve to be read and re-read from time to time. The object of incorporating Fundamental Duties has not been to obtain compliance on pain of penalty for violation, but to make each citizen his own monitor, while exercising or enforcing his rights.

You may be tempted to ask as to why there should be such enumeration, if they are not legally enforceable. I do not desire to give the jurist's answer namely that in interpreting the rights claimed or asserted, the extent to which the Fundamental Duties have been departed from or complied with may also be examined.

Friends, you are quite aware that at all ages of man's long and varied history, humanity has been sustained and nourished by acts of charity, benevolence and service, often with a spirit of self-sacrifice, by people, motivated by compassion and humanitarian considerations for other fellow beings. Such acts, being self-imposed obligations, can be stopped at will. They can never be enforced under any form of compulsion. They are in the nature of socio-ethical convictions transmitted from generation to generation and are reflective of the level of culture of the times. Culture, as E. E. Euban in his "Concepts of Sociology" says, is an elaborate set of meanings and values, shared by members of a society. In my opinion, Fundamental Duties enshrined in Art. 51A of the Constitution should become a socio-ethical concept and a cultural entry of every Indian, and only then will our country awake into the kingdom of Heaven, as Gurudev has so vividly put it. It is for this reason that I suggest a course on citizenship training as inter-disciplinary study for all students.

Friends, I have made these suggestions not in the belief that they are the only solutions. Experts will have to give more attention to the various problems to prevent the aimless approach to degree courses and to imbue the students with a feeling of hope and confidence and to convince them that by a proper approach they can be useful to the society at large.

Further, it is my firm view that teaching in colleges must undergo a processual change in which great attention is paid to the moods, instincts and receptivity of students. The teachers must derive job satisfaction by designing the

course in such a way as to enable even the novice to comprehend without difficulty.

I believe that a teacher's true role resembles the master-sculptor who by chiselling out the unwanted portions of the rock-piece, ultimately gives it the graceful shape which he desires it to be. A good sculptor can produce good pieces of sculpture, provided he gives full attention to the subject, by being constantly close to it, and watching the progress of sculpting. In education, the teacher becomes the sculptor, while the student becomes the object, but unlike the rock in the hands of the sculptor, the student is immensely mouldable. To make a good student, it requires reciprocal action and response from the teacher and the student, and I believe that education and teaching must be oriented in this manner.

Here, I deem it appropriate to express myself strongly against a malady which has been eating into the educational system, and also the finances and time of many anxious students and their parents. The desire to get higher education or technical degrees is virtually insatiable. When the regular institutions bar the entry to many students on account of lack of accommodation, many private institutions try to take their place. Even though they do not conform to the requirements of standards laid down by the University, and even though they are certain that the poor accommodation and the ill-fitting staff would not qualify the institution for grant of affiliation by the university, they do not hesitate to enrol students and commence the courses. They probably believe that by hook or crook they would be able to make up for all their deficiencies. But as it often happens, the university may not grant affiliation and



and full of misery and are in and out, blaming the society, the State, our jobs, our family and ultimately our fate. We do not see the incoherence in our day-to-day living. In this situation, to my mind, the individual must change himself and reform. He should have the highest respect for life which is evergreen and bountiful and which gives its all to him who loves it and who always counts its blessing. Every day dawns with the glow and light of sun and with the freshness of the morning breeze and life softly whispers in our ears 'Live me—destroy me not', awake and keep alive—rise, do not allow your spirits to be dampened by the past regrets nor bewildered by the plans of tomorrow. For yesterday is but a dream and tomorrow is only a vision; but today well lived makes every yesterday a dream of happiness, and every tomorrow a vision of hope. Look well, therefore, to this day.

What is required, therefore, is to have a surging urge to live and to know to live—not to know but to know how to live and then live with love, interest, zest and passion. It is then that the individual would realise that it is by placing living above thinking that he would be able to shake off the diffidence and distrust which have enshrouded him and it would be patently obvious and clear to him that his every activity whether about the acquisition of knowledge or things is submitted to the test of life itself and of its subserviency to the end of living. He would then see that to him the end of living is just living itself. His approach to life would have a welcome change. The possession of knowledge, property, rank and status would not be an end for him but means to enable him to live with an open, free and trusting

mind. Envy, jealousy, hatred, ill-speaking and gossiping would have no room in his living and he would ever seek the best and ever find it. I would, therefore, request my young friends to live with love, interest, zest and passion.

Friends, remember that no activity touching humanity in general can act in a vacuum. Our actions and thoughts will always be influenced by the environment. Everywhere the talk is about the rapid erosion of values and the consequent pollution of public life. If we have to build a self-reliant and self-sufficient and strong

nation, we have to clear the atmosphere of this pollution. This requires the maximum utilisation of our manual resources, but without largely depleting natural resources which cannot be easily regenerated. As Pandit Jawaharlal Nehru said :

"University stands for humanism, for tolerance, for reason, for the adventure of ideas and for the search of truth. It stands for the onward march of the human race towards higher objectives. If the universities discharge their duties adequately, then it is well with the nation and the people." □

## Italian Government Scholarships

Italian Government has offered a few scholarships for a **Course on Technology Transfer of Renewable Energy Sources** to be held from 1st Oct. to 31st Oct., 1987.

The course aims at introducing problems, methodologies, organizational and international issues relevant to the process of technology transfer in the field of renewable energy sources. Particular emphasis will be placed on evaluation methods of energy projects and of technological packages suitable for transfer in different realities.

The scholarships will cover boarding, lodging, pocket expenses, tuition fee, medical insurance, return air ticket.

Sponsored candidates with master's degree in science with 5 years professional standing/experience in the field of energy are to be recommended for nomination by 10 August 1987 (age limit 45 years).

Applications in duplicate on

the prescribed format duly sponsored by the employer are to be sent to Department of Education (External Scholarship Division), Ministry of Human Resource Development, Shastri Bhawan, New Delhi 110001.

A few scholarships have also been offered by the Italian Government for a **Basic Course on Renewable Energy** to be held from 3rd Nov. to 3rd Dec., 1987.

The course aims at supplying basic scientific notions on the possible application of energy from renewable sources. It will include design concepts and necessary optimization techniques for their exploitation.

The scholarships will cover boarding, lodging, tuition fee, return air ticket, etc. Sponsored candidates with first class degree in science/engineering and 5 years professional standing/experience in the field of Energy should be recommended to the Ministry as per details given above by 10 August 1987.

## **BITS Introduces M.V.S.**

The Birla Institute of Technology & Science, Pilani has introduced a Master of Vocational Studies (MVS) degree course. The M.V.S. degrees are :

- An abstraction, labile and codification of the wide range of knowledge and skills needed in supervisory/vocational settings; and

- A route to train people in the lightest rigour of an application of theory to work-oriented tasks of high excellence defined against vocational settings.

M.V.S. is a four-year integrated first degree vocational programme that is offered at the post 10+2 level. The Bulletin announcing MVS courses states, "Unlike the traditional interpretation of vocational degrees, the M.V.S. aims at equipping a candidate with the wide range of knowledge and skills needed to rise in supervisory positions. The degrees are thus offered in functional areas that have been identified on the basis of current and future manpower requirements.

Through the M.V.S., students acquire the fundamental and analytical abilities they need to make and carry out decisions. Foundation courses impart basic knowledge and build analytical minds. Skill based courses provide training in required techniques. Related field, major field and elective courses strengthen functional skills and knowledge and deepen understanding of the changing environment in which modern organisations operate. Instruction in communication and information presentation cultivates oral and written communication skills and develops the ability to present and

implement ideas. An entire year of work experience provides on the job training and helps students develop confidence, maturity, responsibility, inter-personal skills and entrepreneurial ability.

Teaching and evaluation are conducted through non-formal Distance Learning and Co-operative education methods."

Currently M.V.S. degrees are offered in the areas of Information Management, Computer Operations and Application, Human Potential, Rural Development and Paramedical Services.

The following areas may also emerge in future : Bank Management, Graphic Arts, Educational and R & D Operations, Community Development, Consumer Electronics, Publishing Trade, etc.

### **Courses in Film Appreciation**

The universities of Calcutta and Jadavpur are reported to be planning to introduce courses on film appreciation. The courses, now in the final stages of formulation, will be the first in the country to be conducted in the academic sphere. While Calcutta University proposes to introduce the course as a subject at the undergraduate level, Jadavpur University has decided to open a postgraduation department. Both the universities are currently engaged in finalising the administrative arrangements for running the courses.

According to Calcutta University sources the course would be offered at the undergraduate level and the course content will consist of three

papers containing 100 marks each. The study of the history of film-making may be included in the first paper. The second paper is expected to contain materials for a comparative estimate of the Indo-Asian, African and European films. The third paper will include a course on the stages of film-making excluding the laboratory work along with the demonstrative appreciation of representative films. The film would be critically appreciated from the standpoint of film-making and their salient feature highlighted.

At Jadavpur University meanwhile, the course would begin at the postgraduate level with eight papers.

The UGC committee which visited the university seems to have been satisfied with the existing infrastructure available at Jadavpur University.

Film circles believe that, if implemented, the new film course would have a far reaching effect on students and on the education system as a whole.

### **Foundation for Educational TV**

A foundation for educational television is being set up shortly to improve and expand telecast of educational programmes in the regional languages. The foundation with an independent legal status, would be entrusted with the task of producing prototype educational software for all sectors of education besides undertaking research in communication methodologies.

The foundation will utilise the services of existing educational institutions, like the educational media research centres and the audio visual research centres, lang-

uage institutes and media professionals to achieve its objectives.

It would be given non-recurring grants for the creation of service facilities which could be hired out to non-governmental agencies for production of radio and TV programmes and other educational materials.

### **Rs. 410 lakh UGC Aid for Anna Varsity**

The University Grants Commission (UGC) is reported to have sanctioned Rs. 410 lakhs under the Seventh Plan for the development of the Anna University in Madras. The allocation includes Rs. 335 lakhs for engineering, technology and architecture. A sum of Rs. 75 lakhs has already been sanctioned for the faculty of science and humanities.

Among the approved schemes is a new central library with modern facilities including a computer for storage and retrieval of information, and terminals for use by students. The library is to be constructed in two phases during the Seventh and Eighth Plan periods, the allocation for the first phase being Rs. 75 lakhs. A students' centre, a health centre and a book store are also to be established.

The university has already acquired a VAX 11/780 computer system costing Rs. 1.5 crores and the UGC has now sanctioned Rs. 18.5 lakhs for setting up 20 terminals and putting up a building to house these facilities. The computer science and engineering department will function in a building costing Rs. 21.15 lakhs.

The UGC has approved an outlay of Rs. 97 lakhs for staff quarters and Rs. 76 lakhs for students hostels. About half of the cost is

to be borne by the State Government.

### **Course in Light Music**

The SNT Women's University's Department of Music, in collaboration with the Department of Continuing and Adult Education and Extension, proposes to introduce a course in light music. This course will not only strengthen the existing programmes of music but will also help to create a more conducive atmosphere facilitating involvement of the public at large.

The University has been offering music as a subject upto the PhD. level. Diploma and degree courses in light music are also being added.

### **Academic Staff College for Jodhpur Varsity**

The Jodhpur University has been permitted by the University Grants Commission (UGC) to establish an Academic Staff College during the current academic session for providing training to university teachers. According to Vice-Chancellor, Prof. M.L. Mathur, the UGC had also provided a subsidy of Rs. 30 lakh for this purpose. He said that a vocational centre of the Indira Gandhi National Open University was also proposed to be started at the University.

### **Bridge Course Extended**

The Delhi University has decided to continue, for one more year i.e. for 1987-88 academic session, the one-year bridge course meant for students coming from 11+3 or 10+2+2 schemes. Candidates from these schemes must complete this course to be eligible

for admission to M.A., M.Com. and M.Sc. Courses.

### **Bill to Ban Capitation Fee**

The Government is contemplating to introduce a bill in the monsoon session of Parliament vesting the All India Council for Technical Education with statutory powers to effectively check the mushrooming of private technical institutions and to ban capitation fees charged by them for admission purposes. This step is reportedly being taken to curb the commercialisation of technical and professional education.

### **Refresher Course in Chemistry**

A refresher course in Chemistry sponsored by the UGC was held at the Gauhati University from 3-30 June 1987. The objective of the courses was to acquaint the teachers with the Quantum Chemistry and Molecular Spectroscopy (a new paper which has recently been introduced in the syllabus for the undergraduate students). Over 35 teachers from 19 affiliated colleges of the university participated in the course. Apart from the faculty of the Department of Chemistry of the Gauhati University, Prof. B. Majhi (North Bengal University), Prof. I. Haque (Dibrugarh University), Prof. Mihir Choudhury (Indian Association for Cultivation of Science, Jadavpur) and Prof. A.B. Baruah (Iowa State University, USA) also addressed the participants.

### **Dr. Babasaheb Ambedkar Technical University**

The Maharashtra Government plans to set up Dr. Babasaheb Ambedkar Technical University during the current academic session. Courses in petro-chemi-

cal engineering are proposed to be offered at this new University. This was revealed by the State Education Minister in Bombay recently.

### SC, ST Girls Hostels

The Union Government is reported to have launched a scheme of building hostels for girl students belonging to scheduled castes and scheduled tribes and a sum of Rs. 5 crore has been earmarked for the purpose. Under the scheme, the Centre would provide financial assistance to State Governments and Union Territories on a 50-50 matching basis for construction of hostel buildings for these girls studying in middle and higher secondary schools, colleges and universities.

### Environmental Education

The Union Ministry of Environment and Forests has asked the University Grants Commission (UGC) to promote formal education in environment and forestry at the undergraduate and postgraduate levels in universities and research institutes. This step, the Ministry feels, would create an awareness about environment and ecology and lead to availability of experts for environmental impact assessment.

At present environment education forms part of the subjects like zoology, botany, microbiology, civil engineering, agronomy and entomology being conducted at 45 universities. Six universities offer courses in environment education at postgraduate level.

Forestry is being taught at the undergraduate level in eight agricultural universities and eight more universities propose to start the course during the current academic year.

Some universities and research institutes offer subjects pollution control, wildlife management, remote sensing and climatology. A sum of Rs. 6 crores has been provided by the Union Ministry of Environment and Forests for promotion of environmental studies in the Seventh Plan.

### Medical Colleges Derecognised

The Medical Council of India is reported to have derecognised three of the nine medical colleges in Bihar. These colleges are located at Bhagalpur, Gaya and Dhanbad.

## News from Agril. Varsities

### Botanical Pest Control

A six-day International Workshop on "Botanical Pest Control in rice-based Cropping Systems" was inaugurated by Dr. V. Rajagopalan, Vice-Chancellor of Tamil Nadu Agricultural University (TNAU) at Coimbatore recently. The workshop was jointly sponsored by the International Rice Research Institute, Philippines; Asian Development Bank, Manila and East-West

Centre, Hawaii. Dr. V. Rajagopalan in his inaugural address pointed out that although the introduction of semi-dwarf photo-insensitive and high-yielding varieties had revolutionised the rice production in Asia in the last two decades, the conditions that favoured better growth of crops also contributed to the multiplication and spread of pests and diseases. The overuse of synthetic and chemical insecticides had led to the resurgence of

### Recent Publications

1. Monograph on Sample Free Item Analysis : Rs. 50.00
2. Bibliography of Doctoral Dissertations in Social Sciences & Humanities 1983-84 : Rs. 180.00
3. Educational Statistics at a Glance Rs. 75.00
4. Education and Economic Development Rs. 25.00

*Address Enquiries to :*

**Under Secretary (Publications)**  
**ASSOCIATION OF INDIAN UNIVERSITIES**  
 AIU House, 16 Kotla Marg,  
 New Delhi-110002

**Telephones : 3310059, 3312305, 3312429 and 3313390**  
**Telex : 31 5578 AIU IN**      **Gram : ASINDU**

pests of a new order, besides causing health hazards for people.

Dr. R.C. Saxena, Entomologist, International Rice Research Institute, Philippines emphasised the need for less expensive and locally available selective pesticides based on plant derivatives. Dr. S. Jayaraj, Director, Centre for Plant Protection Studies explained the efficacy of neem products in the control of rice pests. Dr. D. Nangju, Agronomist, Asian Development Bank, Manila in his address said that the project would assist in the development of integrated pest and disease management in which botanical pesticides would be partners. Dr. M.S. Rao of Asian Development Bank spoke on the significance of botanical control of pesticides.

### Summer Institute on Surgical Affections

The Faculty of Veterinary Science of the Punjabrao Krishi Vidyapeeth, Akola organised the I.C.A.R. Summer Institute on "Recent Advances in Surgical Affections of Uro-genital System in Farm Animals". Dr. C.M. Sastekar, Joint Director, Animal Husbandry, inaugurated the Institute while Prof. H.B. Ulemala, Vice-Chancellor, presided.

In his inaugural address, Dr. Sastekar appreciated the importance of the topic for field veterinarians and hoped that stress would be laid to solve the day to day problems of the farming community.

Prof. H.B. Ulemala urged that the veterinarians should give maximum service to the farming community to better the condition of animal wealth in the country. Efforts should be made for diversification of livestock. He appre-

ciated the contribution of specialists towards upliftment of economic conditions of small farmers and landless labourers in rural areas.

The deliberations of the Institute which lasted 21 days included theoretical discussions as well as practical demonstrations of recent and advanced techniques used for the treatment. In all 30 participants from the different states of

the country took part in this Summer Institute. Eminent Animal Scientists from all over the country were also invited to deliver guest lectures.

---

### We Congratulate....

Dr. M.L. Mathur who has taken over as Vice-Chancellor of the University of Jodhpur, Jodhpur.

---

### Communication

## VCs Salary

Sir,

In all Central Universities the Vice-Chancellors have been treated as equal to the Additional Secretary to the Government of India and have been allowed a fixed pay of Rs. 3,000/- like Additional Secretaries (before revision). I do not know of other States but the Government of West Bengal is treating the Vice-Chancellors above the rank of an Additional Secretary of the Government of India and have given the Vice-Chancellors a basic pay higher than that of the Additional Secretaries. While the Vice-Chancellor of Calcutta University is given a salary of Rs. 3,500/- (fixed), (as in the case of a Secretary of the Government of India), the Vice-Chancellors of other State Universities are given Rs. 3,250/- (fixed) plus other allowances as admissible over and above the fixed salary. In pointing this out to the readers of the *University News* my intention is to emphasise the point already accepted by the Government of West Bengal and implemented by it as is reflected in the salaries given to the Vice-Chancellors. The Vice-

Chancellors should be treated at least in salary as equal to the Chief Secretary of a State or a Full Secretary of the Government of India. I do not know why the Central Government cannot accept this parity between the Secretary of the Central Government and the Vice-Chancellor of a University. It seems ludicrous that while previously the Vice-Chancellors were treated at par with the Professors of Eminence so far as the scale of pay is concerned, now they have been degraded and given a scale of pay which is not only much lower but the yearly increment in the scale being half of that of the Professor's scale at the later stages. This will reflect how the Government of our country treats this highest authority in an academic institution even though the Government expects and demands almost everything from the Vice-Chancellors.

Yours sincerely,

S.P. Banerjee  
Vice-Chancellor  
University of Burdwan,  
Burdwan

# Ministry of Human Resource Development

## (Department of Education)

### MEXICAN GOVERNMENT SCHOLARSHIPS, 1987-88.

Applications on plain papers are invited from Indian nationals for the award of four Research Fellowships for 1987-88 under the Indo-Mexican Cultural Exchange Programme, offered by the Government of Mexico in the subject-fields of :—

1. Botany ; 2. Spanish Language and Literature ; 3. Physics ; 4. History of Mexico ; and 5. Architecture and Restoration.

**Duration :** Initially one year and can be extended for one more year in suitable cases

**Value :** The Scholarships will consist of a monthly allowance of Mexican pesos 110,000/- which will be paid according to academic background, Life Insurance and Insurance against accident, Medical attention, Inscription charges and fees.

**Passage Cost :** The cost of passage from Mexico to India will be borne by the Mexican authorities. Travel expenses from India to Mexico will be borne by the candidate or his/her sponsors/employers. Subject to availability of funds, the passage cost may be met by the Government of India provided the candidate is eligible under the rules.

**Age Limit :** 33 years as on 1.10.1987, relaxable upto 2 years in upper age for Scheduled Caste/Scheduled Tribe candidates. The upper age limit and experience may be relaxed by not more than 3 months at the discretion of the Selection Committee in the case of brilliant candidates.

**Essential Qualifications :** Uniformly good academic record with 60% marks or more at Master's degree level in the subject chosen, with two years research experience or a Ph.D degree.

**Spanish Language :** Basic knowledge of Spanish Language is an essential qualification.

**Note :** (i) Candidates with equivalent foreign qualification will also be considered. (ii) Master's Degree means M.A./M.Sc./M. Tech. but not M. Phil

or Pre-Ph.D. (iii) Where Grades are awarded, the conversion formula of the University/Institution must be indicated. (iv) Candidates must furnish a clear and precise programme of study/research in Mexico. (v) Applications in the subject-fields either than these specified above will not be considered. (vi) Candidates who have already been abroad for study/specialisation training either on a scholarship or on their own, are eligible to apply only if they have been in India for atleast three consecutive years after their return from abroad. (vii) Candidates should have adequate knowledge of the geographical situation, culture and heritage of India and Mexico. (viii) Applications of candidates who are at present abroad will not be considered. (ix) Candidates who do not possess the requisite qualification need not apply. (x) The application form should accompany a crossed Postal Order of Rs. 5/- (and Rs. 1.25 in case of Scheduled Caste/Scheduled Tribe and other backward classes) payable to the Secretary, Ministry of Human Resource Development (Department of Education), New Delhi. (xi) Applications which do not contain Postal Order will be considered incomplete and will not be considered.

Candidates would apply for the above scholarship on a plain paper, furnishing the details/particulars indicated in the application format to the Secretary, Ministry of Human Resource Development, (Deptt of Education), External Scholarships Division, ES. 3 Section, Room No 516, B-Wing, Shastri Bhavan, New Delhi-110001 by 7th August, 1987. The application received late will not be entertained.

#### FORMAT OF THE APPLICATION

1. Name of the Scholarships Scheme : Mexican Government Scholarships, 1987-88.
2. (a) Subject (b) Sub-subject
3. Name of the Candidate (in Block letters) with full Mailing address
4. Date of birth and the State to which the candidate belongs
5. Whether a member of Scheduled Caste/Scheduled Tribe or a Tribal or aboriginal community. If so, give full particulars

6. Academic record starting from High School/ Higher Secondary

Name of the University/ Board/ Institutions	Examination (s) passed	Year of passing	Division/ Class with position, if any*	% of marks obtained & position, if any.	Subjects taken
---	------------------------	-----------------	--	---	----------------

\*In case no Division/Class is awarded & only grading is done the conversion formula adopted may be mentioned.

7. Details of Professional, Practical Training & Research Experience, specifying the period and number of papers published, previous employment with name and date of employment, if any.
8. Nature of the present employment, with date of appointment, designation and the name and address of the employers.

9. Have you been abroad ? If so, give full particulars of the country and the period ; also, mention the year of return to India.
10. Proposed programme of study/research/training specifying, (i) the work in which engaged at present (ii) nature and programme of study/research desired (iii) future plans/prospects after the proposed studies/research, and (iv) how are these related to the technical or economic development of India ?
11. Crossed Postal Order of Rs. 5/- (Rs. 1.25 in case of SC/ST candidates etc. (No. and date of Postal Order to be given) may be attached with the form with passport size photograph (one copy).

**Note :** Employed persons must send their applications fully sponsored by the Employers. However, advance applications will be considered **provisionally** pending sponsorship by employers.

Place :

Date :

davp 511/57/87

(Signature of the Candidate)

## HAVE YOU ACQUIRED A COPY OF UNIVERSITIES HANDBOOK—1985-86

### Salient Features

—Contains information covering all the Indian Universities including agricultural universities, institutes of national importance (including IITs) and deemed to be universities on following heads of information :

- \* Officers & Deans of Faculties;
- \* Library & Research Facilities;
- \* Scholarships and Fellowships;
- \* Academic year—last date for admissions and the approximate dates of examinations;
- \* Courses of Studies;
- \* Minimum requirements for admission to each course, duration and the subjects of study for each course;
- \* Names of Professors and Readers/Assistant Professors together with their academic titles department-wise;
- \* Names of Colleges together with names of Principals and Heads of Postgraduate Departments in Colleges;
- \* Statistics on examination results.

—Introductory chapter on overview of the University System in India.

—Map, showing location of universities.

*Deluxe Binding with Carton.*

**Price :** (Indian Edition) Rs. 450.00  
**Institutions :** 10% Discount;  
Postage & Packing Free

**Rush Your Order Today**

Under Secretary (Publications)  
**ASSOCIATION OF INDIAN UNIVERSITIES**  
AIU House, 16 Kotla Marg, New Delhi-110002  
Telephones : 3310059, 3313390, 3312305, 3312429

# AIU Library

Established in 1965, the AIU Library has acquired over the years a valuable collection of books and documents on Higher Education. Among the topics prominently represented are Educational Sociology, Educational Planning, Educational Administration, Teaching & Teachers' Training, Examinations, Economics of Education and Country Studies. Developing fields of Adult Education, Continuing Education and Distance Education, and Educational Technology are also well stocked. The Library is particularly strong in its collection of reports whether they are on the setting up of different universities or on the state of Higher Education. Files of Annual Reports of different universities are also maintained. Readers are kept informed of the latest acquisitions through our column 'Additions to AIU Library'.

The Library also receives about a 100 periodical titles on Higher Education. All these are indexed regularly and a select list appears every month as 'Current Documentation in Education'.

Doctoral Degrees awarded during the preceding month are reported as 'Theses of the Month' while registrations made for such degrees are flashed as 'Research in Progress'. Bibliographies are also compiled and supplied on demand.

Research scholars and students of education are welcome to use these resources. The Library is open from 9-00 a.m. to 5-30 p.m. Monday through Friday. Access can also be had through inter library loan for which requisition must be made through your Librarian.

## ADDITIONS TO AIU LIBRARY

Agrawal, Mamta *Education in modernization: A Study of Hindu and Muslim women* Delhi, Eduresearch Publications, 1986. viii, 140p

Almond, Gabriel A and others, ed *Progress and its discontents*. Berkeley, University of California Press (c1977) xiv, 565p.

Andhare, Sridhar. *Chronology of Mewar paintings*. Delhi, Agam Kala Prakashan, 1987 159p.

Arya, Krishan Singh and Shastri, P D *Swami Dayananda Saraswati: A study of his life and work* Delhi, Manohar (c 1987) ix, 35p.

Banerjee, Projesh *Indian ballet dancing*. Delhi, Abhinav (c 1983) xiv, 180p.

Basham, A.L. *Wonder that was India* London, Sidgwick & Jackson (c 1967) xxi, 567p.

Bowes, Pratima. *Between cultures*, Delhi, Allied (c 1986) 230 p.

Chaudhuri, A.B. *Santals: Religion and rituals*. Delhi, Ashish, 1987. 229p.

Clark, Burton R., ed. *School and the university: international perspective*. Berkeley, University of California (c1985) xii, 337p.

Dale, Pater N. *Myth of Japanese uniqueness* London, Croom Helm (c 1986) 233p.

Gross, Michael J. *Montessori's concept of personality*. New York, University Press of America (c 1978) vii, 144p.

Gupta, Manjul. *Study of Abhinavabharati on Bharata's natyasastra and avaloka on Dhananjaya's dasarupaka: Dramaturgical principles*. Delhi, Gian (c 1987) ix, 327p.

Hutchinson, Walter, ed. *Customs of the world A popular account of the manners, rites and ceremonies of men and women in all countries* Delhi, Concept, 1984 584p

Karier, Clarence J *Individual, society and education A history of American educational ideas* Urbana, University of Illinois Press (c 1986) xxiv, 459p.

Krishna Murthy, K. *Social and cultural life in Ancient India*. Delhi Sundeep Prakashan, 1982 162p.

Maikap, S C. *Cadet Corps in India Its evolution and impact* Calcutta, Naya Prokash, 1979 xi, 237p

Malik, S C, ed *Determinants of social status in India*. Delhi, Motilal Banarsidass (c 1986) xi, 192p

Mann, K. *Tribal women in a changing society*. Delhi, Mittal, 1987. vi, 172p.

Moise, Edwin E *Modern China: A history*. London, Longman (c 1986) xvi, 256p

Mookerjee, Ajit *Ritual art of India*. London, Thames and Hudson (c 1985) 176p.

Morrow, Ann. *Highness: The Maharajahs of India*, London, Grafton Books (c 1986) xiii, 290p.

Ram Avtar Veer. *Music of India 6,000 B.C. to 1000 A D. 2V*. Delhi, Pankaj, 1986. 280p. : 256p.

Ranchan, Som P. *Anatomy of the Indian psyche*. Delhi, Ajanta (c 1987) viii, 166p.

Sarkar, H B. *Cultural relations between India and Southeast Asian Countries*. Delhi, Indian Council for Cultural Relations (c 1985) xxii, 355p.

Sasthi, Brata. *India: The perpetual paradox*. Calcutta, Rupa, 1986. 336p.

Shirk, Susan L. *Competitive comrades: Career incentives and student strategies in China*. Berkeley, University of California Press (c 1982) xiii, 231p.

Smith, Virginia B. and Bernstein, Alison R. *Impersonal campus*. San Francisco, Jossey-Bass (c 1979) xviii, 135p.

Soran Singh, *Scheduled castes of India: Dimensions of*

*social change*, Delhi, Gian (c 1987) vi, 186p.

Tiedt, Pamela L. and Tiedt, Iris M. *Multicultural teaching: A handbook of activities, information, and resources*. Boston, Allyn and Bacon (c 1986) xii, 358p.

Upreti, H.C. *Youth politics in India*. Jaipur, Printwell Publishers (c 1987) xi, 128p.

## THESES OF THE MONTH

### A List of Doctoral Theses Accepted by Indian Universities

#### HUMANITIES

##### Philosophy

1. Goswami, Rashmi. *Language of music* NEHU.
2. Sahoo, Dibakar. *The concept of justice: A critical study*. Berhampur.
3. Synrem, H. Kelian. *Revivalism in Khasi Society*. NEHU.
4. Tripathi, Surendra Kumar. *Meemansa darshan mein Prabhakar Sampradaya*. Bundelkhand.

##### Language and Literature

##### English

1. Bandyopadhyay, Salilbaran. *William Golding: His mind and art*. Calcutta.
2. Bisht, Priya Vrat. *The feminine principle in the modern Indo-English novel: An inter-disciplinary approach*. HP.
3. Markandeya, Rakesh. *Letters of Swami Vivekananda: A study of his mind and art*. H.P.
4. Niyazi, Mehruddin Mukhtar. *Society and the individual in T.S. Eliot's poetry and plays*. Nagpur.
5. Pakle, Gajanan Shankar. *Sri Aurobindo's use of image, symbol and myth with particular reference to his poetry*. Shivaji.
6. Ramakrishna Rao, Avasara. *Apocalyptic vision in the novels of George Orwell*. Andhra.
7. Srinivasan, Padma. *Mysticism in English and Tamil poetry: comparative study*. Madurai.

##### Sanskrit

1. Arya, Guddi. *Valmiki Ramayan mein pramukh patron ka charitra chitra*. Kumaun.
2. Bora, K S. *Vishanshatkiya Sanskrit kavya sahitasya-paryalochanam*. Kumaun.
3. Lohani, Manju. *Mahakavi Padamshastri: Vyaktitva evam krititva*. Kumaun.
4. Misra, Shobha. *Sanskrit sahitya mein Shrimati Indira Gandhi: Ek sameekshatmak adhyayan*. Kumaun.
5. Pattanayk, Dilipkumar. *God and the individual self in the Nyaya Philosophy*. Calcutta.
6. Raj Kumar. *Prachya vyakaran shastra ke prachar mein Maharishi Dayanand ka Yagdan*. Panjab.
7. Razdan, Satya Bhama. *Kashmiri bhasha ke Sanskrit moolak shabdavali*. Jammu.

8. Salunkhe, Anna Hari. *A critical study of the Carvaka School of thought*. Shivaji.

9. Sharma, N.C. *Avanti Sundari katha ka sameekshatmak adhyayan*. Kumaun.

10. Sharma, S.G. Pt. Shree Trayambak Sharma praniti Shri Swami Vivekanand Charitam Mahakavya ka samalochnatmak adhyayan Kumaun.

11. Tewari, N.C. *Acharya Sharadatnaya virachit bhav prakashnasya sameekshatmak adhyayan*. Kumaun.

##### Punjabi

1. Rajinder Kaur. *Kartar Singh Duggal de chonveyan novelan da alochanatmak adhyayan*. Delhi.
2. Sharma, Shushil. *Contemporary society as reflected in Punjabi folk songs in Jammu region*. Jammu.

##### Hindi

1. Awasthi, Mahendra Prasad. *Ram Kavya ke prishth bloomi mein Lal Das ki Avadh Vilas ka adhyayan*. Bundelkhand.
2. Belgaumwale, Raziya Begum Anwar Hussain. *Comparative study of drama of Upendranath Ashk and Dr. Laxmi Narayanlal*. Karnatak.
3. Bora, Pushp Lata. *Nai kavita mein prakriti chitra: San 1950 se December 1980 tak*. Kumaun.
4. Dikshit, Secma. *Vishram Sagar ka kavyashastriya adhyayan*. Bundelkhand.
5. Dubey, Premnarayan. *Acharya Dr. Hazari Prasad Dwivedi ka Upanyas sahitya*. Ravishankar.
6. Dwarka Prasad. *Nai kavita mein manav vad*. Delhi.
7. Gupta, Kusum. *Narmada Prasad Khare: Vyaktitva evam krititva*. HS Gour.
8. Jain, Surekha. *Bundeli lokgeeton mein upasana ka swarup*. Bundelkhand.
9. Kamla Pati. *Saket aur Uttar Ram Charitam ka tulnatmak adhyayan*. Kumaun.
10. Khare, Vinod Kumar. *Rajdhar Satsai ka kavyashastriya anusheelan*. Bundelkhand.
11. Nakate, Rama Krishna. *Anantlal Nagar. Vyaktitva aur Krititva*. Shivaji.
12. Pande, Padmakar. *Hindi patrakarita aur rashtriya andolan, 1920-1947*. Delhi.
13. Ranvir Singh. *Hindi upanyas mein manavvad, 1947-72*. Delhi.
14. Sharma, Bharti. *Sumitranandan Pant ke kavya granthon ke bloomikaon ka alochnatmak adhyayan*. Durgawati.

15. Sharma, Deepa. *Yashpal ke upanyason mein rajnitik chetna ka vikas*. Kumaun.

16. Sharma, Madhu Bala. *Pant kee kavya bhasha ka kavya shastriya adhyayan*. Delhi.

17. Shrivastava, Dharmendra Nath. *Hindi upanyason mein samajik vighatan, 1950-1975*. Bundelkhand

18. Shukla, Vimalash Awadh Vilas mahakavya ka shodh parak anusheelan. Bundelkhand

19. Tiwari, S.M. Sumitranandan Pant ke kavveta sahitya ka adhyayan. Kumaun.

20. Tiwari Ranjana. *Bundeli shahid sampada ka sanskritik anusheelan*, HS Gaur.

21. Tripathi, Shyam Mohan. *Shuddha Dwaitvad aur uska adhunik Hindi Krishna kavya per prabhav*. Bundelkhand.

22. Tyagi, Pratibha. *Radhaswami sampradaya ka sahityik evam darshnik virechan*. Bundelkhand.

#### Bengali

1. Mukhopadhyay, Jyotiramay. *Rabindra sahitya itihās chinta-o-tahar vivartan, 1875-1900*. Calcutta

#### Marathi

1. Joshi, Dattatraya Nagesh Rao. *Incarnation of English poetry in Marathi 1818-1920*. Karnatak.

2. Joshi Rao, Neela B. *Shree Dasvathut bhaktimarg*. Nagpur

3. Uttam Govind. *Shree Shatchandra Tonga vanchya samagra sahityacha chikitsak abhvas*. Nagpur.

#### Gujarati

1. Dholaria, B.J. *A critical study of folktales of Saurashtra with special reference to motif and technique*. Saurashtra.

2. Marvania, M.L. *Short stories of Jayant Khatir Their place and impact on short stories of Gujarati literature*. Saurashtra.

#### Tamil

1. Jalaja, K.R. *Political ideas in the three great epics*. Madurai.

2. Kamatchi, P. *Periyapurānam Kattum samudhaya nilai*. Madurai.

3. Roselet, S. *Kambarayanathil Purathanai*. Madurai

4. Sankaravallinayagam, A. *Life history and literary service of V.O.C.* Madurai.

#### Telugu

1. Narsaiiah, S. *Desi matre in Telugu: Its origin and Development*. Osmania.

#### Geography

1. Gupta, Devicharan. *Integrated area development of Tehsil Narasim in Banda District*. Bundelkhand.

2. Rinawma, P. *Geomorphology and agricultural development in Lunglet District, Mizoram*. NEHU.

3. Sahu, Kiran. *Spatial patterns of socio-economic changes in Bastar District*. Ravishankar.

4. Shukla, Ram Kishore. *Ramayana: A study in ancient geography*. Bundelkhand.

#### History

1. Chhibbar, Shashi Prabha. *Social, economic and cultural history of Kashmir in the 17th century*. Jammu.

2. Deshmukh, Kiran Vishwas Rao. *Madhyayugeen Marath-vangvateel murtishastra*. Nagpur.

3. Gupta, Uma Rani. *Non-cooperation movement in Delhi*. Delhi.

4. Kadam, Jaysinh Jagannath. *Working of Dyarchy in Bombay Presidency, 1921-1937*. Shivaji

5. Kikani, D.J. *Historical, educational, social and cultural development of Rajkot*. Saurashtra.

6. Negi, K.S. *Aupniveshik kal mein Mewar. Uttarakhand mein samajik arthik picchharepan ka itihāsik adhyayan*. Kumaun

7. Sarkar, Chandiprasad. *The Bengali Muslims. A study in their politicization*. Calcutta.

8. Sharma, Vijay Kumar. *Vaishnavism in Jammu: A study based on the Baishnava shrines of the Jammu region*. Jammu

9. Vyas, R.T. *The cultural contribution of the Swaminarayan Sampradaya in Gujarat during the nineteenth century*. Saurashtra.

## DO YOU WANT TO ENTER 21ST CENTURY WITH A BANG ?

Do you want to participate in the computer revolution ?

## READ PITAMBAR'S

MOST UPTODATE & HIGHLY ACCLAIMED BOOKS

1. **Programming in Basic** : by N.L. Sarda  
Price Rs 27.00 pp 300 Crown Quarto
2. **Digital Computer Design Principles** :  
by M.R. Bhujade  
(with introduction to Microprocessors)  
Price Rs. 35.00 pp 288 Crown Quarto
3. **COBOL Programming with Business Applications** :  
by N.L. Sarda  
Price Rs. 32/- pp 386 Crown Quarto
4. **Programming in Pascal** :  
by N.L. Sarda  
Price Rs 26.00 pp. 336 Crown Quarto
5. **Microcomputers: Programming & Utilization** :  
by N.L. Sarda  
Price Rs 20.00 pp. 186 Crown Quarto
6. **Workbook in Basic** by V.B. Aggarwal & M.P. Goel  
Price Rs 20.00 pp 112 Crown Quarto

Contact your local Bookseller or Order  
Post Free VPP to:

## PITAMBAR PUBLISHING COMPANY

888, East Park Road, Karol Bagh,  
NEW DELHI-110005

## CLASSIFIED ADVERTISEMENTS

### ALIGARH MUSLIM UNIVERSITY

#### ALIGARH

Advertisement No. 4/87-88

Dated : July 1, 1987.

Applications on the prescribed form are invited for the following posts :

**Scale of pay :** Rs. 1500-60-1800-100-2000-125/2-2500 plus allowances (Pre-revised).

#### 1. Professor of Physics (Permanent) Department of Physics.

**Qualifications :** A eminent scholar with published work of high quality actively engaged in research. About ten years experience of teacher and/or research Experience of guiding research at doctoral level

OR

An outstanding scholar with established reputation who has made significant contribution to knowledge.

#### Readers

**Scale of pay** Rs 1200-50-1300-60-1900 plus allowances (Pre-revised).

#### 2. Reader in Urology, Department of General Surgery.

**Qualifications :** M.Ch (Urology)

#### Teaching/Research Experience

As Lecturer in Urology for five years in a Medical College

#### 3. Reader in Pathology (Haematology & Blood Banking), Department of Patho- logy.

**Qualifications I-Essential :**  
M.D. (Pathology)/  
M.D. (Pathology & Bacteriology)/  
M.D. Pathology with Bacteriology)/  
Ph.D (Pathology)/  
D.Sc. (Pathology).

#### Teaching/Research Experience

As Lecturer in Pathology Department of a Medical College with experience and special interest in Haematology for atleast five years.

**II-Desirable :** Original research publications in the specialty in Indian and foreign journals.

**Note :** The selected candidate will be responsible for organising and supervising the Blood Bank services in addition to Haematology work.

#### 4. Reader in Developmental Anatomy and Genetics, Department of Anatomy.

**Qualifications :** I-Essential : M.S. (Ana-  
tomy)/

M.B.B.S. with M.Sc (Medical Ana-  
tomy)

Ph.D. (Medical Anatomy)/

D.Sc. (Medical Anatomy).

#### Teaching/Research Experience

As Lecturer in Anatomy for five years in a Medical College.

**II-Desirable :** Original research publications in Developmental Anatomy (Embryology) and Genetics in Indian/ Foreign Journals

Preference will be given to those having undergone recognised training in the techniques of the speciality.

#### Note : For all the Posts of Readers

Persons appointed as Lecturer prior to 1982 recommendations, the teaching experience as Registrar and as Lecturer be considered eligible for appointment as Reader.

#### 5. Lecturer in General Surgery, Depart- ment of General Surgery.

**Scale of pay :** Rs. 700-40-1100-50-1600 plus allowances (Pre-revised).

**Qualifications :** I-Essential : M.S.  
(Surgery)/

M.S (General Surgery).

#### Teaching/Research Experience

Requisite recognised Postgraduate qualification in the subject.

**II-Desirable :** Good Clinical experience after obtaining P.G. qualifications

#### Readers

**Scale of pay :** Rs. 1200-50-1300-60-1900 plus allowances (Pre-revised).

#### 6. Reader in Pharmacology, Department Ilmul Advia, A.K. Tibbiya College.

**Qualifications :** I-Essential : 1. M.D.  
(Pharmacology).

2. Knowledge of Urdu.

3. Teaching experience of atleast five years in the subject.

**II-Desirable :** Published work.

#### 7. Reader in Moalijat-e-Tib, Depart- ment of Moalijat, A.K. Tibbiya College.

**Qualifications :** I-Essential : (i) Degree/  
Diploma in Unani Medicine from a  
University established by law or a  
Statutory Board/Faculty/Examining  
body of Indian Medicines or equivalent

(ii) Teaching experience in a recogni-  
sed Institution for five years.

**II-Desirable :** (i) Post-graduate  
qualifications in Unani from a recog-  
nised Institution/University Established  
by law.

(ii) Original published papers/books  
on the subject. Knowledge of Arabic  
and English.

#### Lecturers

**Scale of pay :** Rs. 700-40-1100-50-  
1600 plus allowances (Pre-revised).

#### 8. Lecturers in Ilmul Advia, Department of Ilmul Advia, A.K. Tibbia College.

#### 9. Lecturer in Munafeul Aza (Physio- logy), Department of Kulliyat, A.K. Tibbiya College.

**Qualifications :** I-Essential: (i) Degree/  
Diploma in Unani Medicine from a  
University established by law or a  
Statutory Board/Faculty/ Examining  
body of Indian Medicines or equivalent.

(ii) Teaching experience in a recog-  
nised Institution for three years.

**II-Desirable :** (i) Post-graduate quali-  
fications in Unani from a recognised  
Institution/University established by  
law.

(ii) Original published papers/books  
on the subject.

**Note :** If persons with requisite  
experience are not available the condi-  
tion of experience may be relaxed in  
suitable cases at the discretion of the  
Selection Committee.

#### Readers

**Scale of Pay :** Rs. 1200-50-1300-60-  
1900 Plus allowances (pre-revised).

**10. Readers in Chemical Engineering/Petroleum Processing Institute of Petroleum Studies and Chemical Engineering.**

**11. Reader in Chemical Engineering, Department of Chemical Engg.**

**Qualifications : I-Essential :** A good academic record with a Doctor's degree in a relevant field. About five years experience of teaching and/or research and development.

Provided further that candidates not possessing Ph.D may be considered if they have to their credit equivalent research published work or design development work of a high order either in the institution or in an industry.

OR

In the case of persons to be recruited from industry or professional fields, candidate should possess good academic record with recognised professional work of about 7 years which should include innovation and, or research and development

**II-Desirable :** For Post No. 10 Readers in Chemical Engineering/Petroleum Processing.

**Field of Specialisation**

To be specialized in one or more of the following areas :

Transfer processes, Reaction Engineering, Chemical Engineering, Thermodynamics, Computer Aided Design and Optimization Petroleum Refining, Petrochemicals.

**Note :** Adequate background of Petroleum Refining. (for one post only)

**For Post No. 11 Reader in Chemical Engineering**

Fluid Mechanics/Heat Transfer/ Mass Transfer Reaction Engineering/ Transport Phenomena, Petroleum Technology. To be specialised in atleast two of the above by published research work in reputed journals and teaching experience to postgraduate classes.

**Lecturers**

**Scale of Pay :** Rs. 700-40-1100-50-1600 plus allowances (Pre-revised).

**12. Lecturers in Architectural Assistantship, University Polytechnic**

**Qualifications :** Bachelor's degree in Architecture plus two years of relevant professional experience.

OR

Master's degree in Architecture and one year's relevant professional experience.

Provided further that if a candidate does not possess a Master's degree in Architecture and Professional experience or a person possessing such experience is not found suitable, the person appointed will be required to obtain the desired professional experience within a period of five years on his appointment failing which he will not be able to earn future increment until he fulfils this requirement.

**13. Lecturer in Sunni Theology, Department of Sunni Theology.**

**Qualifications I-Essential :** (a) Master in Theology (M Th)

OR

M.A. in Arabic or Islamic Studies with Fazil-e-Madarsa

OR

Fazil-e-Madarsa with at least three years teaching experience/evidence of research.

OR

Foreign qualifications equivalent to Master's degree.

(b) Working knowledge of English

**II. Desirable :** (1) Ph.D degree or published work of high standard

(2) Some Teaching experience in a University or Madarsa of repute.

**14. Lecturer in Chemistry : (Temporary), Department of Chemistry.**

**Qualifications**

**I. Essential :** (a) A Doctor's degree or research work of an equally high standard; and

(b) Good Academic record with at least second class (C in the seven point scale) Master's degree in a relevant subject from an Indian University or an equivalent degree from a foreign University.

Having regard to the need for developing inter-disciplinary programmes the degrees in (a) and (b) above may be in relevant subjects.

Provided that if the Selection Committee is of the view that the research work of a candidate as evident either from his thesis or from his published work is of very high standard, it may relax any of the qualifications prescribed in (b) above.

Provided further that if a candidate possessing a Doctor's degree or equivalent research work is not available or is not considered suitable, a person possessing a good academic record (weightage

## DEUTSCHER AKADEMISCHER AUSTAUSCHDIENST (DAAD)

### THE GERMAN ACADEMIC EXCHANGE SERVICE

has again offered fellowships to the Government of India for Indian nationals resident in India (academic year 1988-89)

**MINIMUM QUALIFICATIONS :** Master's Degree followed by 2 years experience

**AGE LIMIT :** 32 years as on 1st June 1988

**SPONSORED and EMPLOYED** staff of universities/institutions deemed to be universities/institutes of National Importance may apply.

Applications through proper channels should reach the **MINISTRY OF HUMAN RESOURCE DEVELOPMENT** by **15.9.1987** and the **UNIVERSITY GRANTS COMMISSION** by **30.9.1987**. Prescribed proformas for application will be available with them when they officially announce the fellowships shortly.

being given to M.Phil. or equivalent degree or research work of equality) may be appointed provided he has done research work for atleast two years or has practical experience in a research Laboratory/Organisation on the condition that he will have to obtain a Doctor's degree or give evidence of research of high standard within eight years of his appointment, failing which he will not be able to earn future increments until he fulfils these requirements.

**11. Desirable:** Ability to teach Analytical Chemistry at Post-graduate and under graduate level.

**15 Casualty Medical Officers :** (Two Posts) (Parmanent) JNMCH

**Scale of Pay :** Rs 700-40-1100-50-1600 plus allowances (Pre-revised)

**Qualifications**

**I. Essential :** (i) M B B.S (ii) Post-graduate Diploma in a Clinical subject. (iii) Three years experience as Resident or Registrar in a teaching Hospital.

**II Desirable :** Experience of Casualty work.

**16 Assistant Archivist :** (One post) (Permanent) Sir Syed Academy.

**Scale of Pay :** Rs 700-40-1100-50-1600 plus allowances (Pre-revised)

**Qualifications :** 1. M A in History or Persian. 2. Diploma in Archival Studies 3. Knowledge of Persian and Urdu 4. Some experience of working in an Archives or Oriental Division of a Library.

**Note :** Those who have applied in response to Advertisement No. 25 86-87 dated 12-3-1987 need not apply again.

**17. Scientific Officer .** (One post) (Permanent) Department of Physics.

**Scale of Pay :** Rs. 700-40-1100-50-1600 plus allowances (Pre-revised)

**Qualifications**

**I. Essential :** (i) First or high Second Class Master's degree in Physics with specialization in Electronics.

(ii) Research work of a high standard.

**II. Desirable :** (i) Five years experience of teaching undergraduate classes.

(ii) Evidence of being engaged in innovative teaching or production of teaching materials.

**18. Programmers, Computer Centre** (Three posts)

**Scale of Pay :** Rs. 700-40-1100-50-1600 plus allowances (Pre-revised)

**Qualifications : I-Essential :** A Master's degree in Science or a Bachelor's degree in Engineering followed by at least three years experience as Programmer or its equivalent at a Computer Centre.

OR

A postgraduate Diploma or degree in Computer Science with at least two years experience as a Programmer or its equivalent at a Computer Centre.

**II-Desirable :** A higher degree in Computer Science or three years experience of developing and maintaining Computer Soft Ware and Operating System.

**Job Requirements :** 1. To help in the operation of Computer System in multi-programming, batch and time-shared modes and Computer Network,

2. To provide assistance to users in Program development;

3. To participate in the teaching and other academic Programmes of the Centre;

4. To assist the Computer Centre in its operational aspects and any other duties that may be assigned from time to time.

**19. Senior Technical Assistant (one post) (Leave vacancy) Department of Medicine, JN Medical College.**

**Scale of Pay :** Rs 1640-60-2600-EB-75 2900 plus allowances (Revised Scale).

**Qualifications : I-Essential :** B. Sc. with previous experience of atleast five years in a Biochemical/Pathological Laboratory of a Medical College.

Must be well versed in Biochemical & Pathological investigations for Medical research and patients care.

**II-Desirable :** Diploma in Medical Lab. Technology (Pathology)

**Note :** The eligible candidates will have to undergo a practical test before interview.

**20. Senior Technical Assistant (Theatre) (one post) (Permanent) Department of Ophthalmology.**

**Scale of Pay :** Rs. 1640-60-2600-EB-75-2900 plus allowances. (Revised)

## AMRAVATI UNIVERSITY

### AMRAVATI

### EMPLOYMENT NOTICE

**No. 1-B/815/87**

**Dated : 15-7-87**

Applications are invited for the following post.:

		Pay Scale
<b>Reader</b>	1 : Business Administration & Management (Engineering Graduate with requisite qualification are eligible to apply)	Rs. 1200-1900/-
	1 : Applied Electronics	Rs. 1200-1900/-
<b>Lecturer</b>	2 : (1 for B.C ) Computer Science	Rs. 700-1600/-
<b>System Analyst</b>	1 : Computer Unit	Rs. 1100-1700/-
<b>Programmer</b>	1 : Computer Unit	Rs. 680-1250/-

8 copies of prescribed application forms with details of qualifications, specialisation required, will be supplied on payment of Rs. 10/- (non-refundable) by Bank Draft OR Crossed Indian Postal Order payable to the undersigned alongwith a self addressed envelope (12x25 cm) affixing postal stamps worth Rs. 3.50/-. Last date for receipt of application forms will be 27th Aug. 1987.

**REGISTRAR**

**Qualifications : I-Essential :** B. Sc. in Ophthalmic Techniques. Adequate experience of working as Theatre Technician in an Eye Hospital of repute or Medical College.

OR

B.Sc. with Certificate/Diploma in Nursing or Ophthalmic Techniques like Diploma in Optometry or Diploma in Orthoptics. Two years experience of working as Theatre Technician in reputed Eye Hospital/Medical College.

OR

Intermediate (Science) or equivalent with Certificate/Diploma in Nursing or ophthalmic techniques like Diploma in Optometry/Orthoptics. Five years experience of working as Theatre Assistant in reputed Eye Hospital Medical College,

**II Desirable :** Experience of working in O.T. specially in Rural Eye Relief Camps.

**Note :** The incumbent is required to work under Rural Eye Care Programme of the 20 Point National Programme.

**21. Senior Technical Assistant (Dawasaz Gr. I) (one post) (permanent) A.K. Tibbiya College Hospital**

**Scale of Pay :** Rs. 1640-60-2600-EB-75-2900 plus allowances (Revised)

**Qualifications : I-Essential:** Educational: High School or equivalent oriental qualifications recognised by the University

**Technical :** Diploma in Unani Medicine Sahayak Hakim recognised by the State/Board/University.

**II-Desirable :** Three years experience in Dawasazi (Pharmacy) will be preferred.

**Note :** Candidates having good experience in Dawasazi (Pharmacy) may be relaxed in suitable cases in respect of their technical qualifications.

**22. Assistant Security-Cum-Fire Officer, Medical College Hospital**

**Scale of Pay :** Rs. 1640-60-2600-EB-75-2900 plus allowances (Revised)

**Qualifications I-Essential :** (i) Bachelor's degree

(ii) Five years experience involving

security in some Government/Semi Government/Private Institution of repute.

(iii) Knowledge of Fire fighting techniques.

**II-Desirable :** (i) A good physique and personality.

(ii) Age below 40 years.

**23. Health Educator, Department of Community Medicine**

**Scale of Pay :** Rs. 1640-60-2600-EB-75-2900 plus allowances (Revised)

**Qualifications I-Essential :** Post-Graduate Diploma in Health Education.

**II-Desirable :** Three years experience in Health Education

**Note :** Selected candidates will have to work at Rural Health Training Centre of the Department at Jawan about 15 Kms from the Medical College,

**24. Senior Technical Assistant, Plastic Burn and Facio-Maxillary Surgery Unit (One post), Department of General Surgery.**

**Scale of Pay :** Rs. 1640-60-2600-EB-75-2900 plus allowances (Revised)

**Qualifications I-Essential :** B.Sc with training experience in Plastic Surgery.

**II-Desirable :** Five years experience of working in Plastic Surgery Operation Theatre

**Note :** Qualifications may be relaxed

in case of person having long experience in Plastic Surgery.

**25. Mechanic (Motors), Central Automobile Workshop**

**Scale of Pay :** Rs. 1400-40-1800-EB-50-2300 plus allowances (Revised)

**Qualifications I-Essential :** 1. (i) Diploma in Automobile Engineering with not less than 5 years' experience in any workshop of repute

OR

(ii) I.T.I certificate in Motor Mechanic's Trade with not less than 7 years' experience in any Workshop of Repute

OR

(iii) High School with not less than 10 Years experience in any Workshop of Repute

and

2 Having Licence of Heavy Vehicle Driving

(The academic qualifications of those technical staff who have put in atleast 10 years of service in the immediate lower grade in the University in the job, trade may be relaxed in suitable cases).

**Experience :** Experience relaxable in cases of candidates otherwise found suitable.

**Note :** The eligible candidates will have to undergo test before interview.

## Shortly Releasing

Handbook of Medical Education-1987

New Technologies in Higher Education

Studies in Distance Education

*Address Enquiries to :*

**Under Secretary (Publications)**

**ASSOCIATION OF INDIAN UNIVERSITIES**

**AIU House, 16 Kotla Marg,  
New Delhi-110002**

**Telephones : 3310059, 3312305 3312429 and 3313390**

**Telex : 31 5578 AIU IN Gram : ASINDU**

**26. Technical Assistant (Instrumentation) (two posts) (Permanent) Department of Electrical Engineering.**

**Scale of Pay : Rs 1400-40-1800-EB-50-2300 plus allowances (Revised)**

**Qualifications : Essential :** Diploma in Electrical Engineering and/or Electronics Engineering with two years experience in operation, repair and maintenance of equipment used in Electrical Engineering Laboratories of a University or a reputed firm

**OR**

Ordinarily 8 years Schooling followed by 8 years experience as above

**OR**

Trade Certificate and five years experience as above.

**Note :** The candidates will have to undergo a practical test before interview

**27. Senior Pharmacist (One post) (Permanent) A.K. Tibbiya College.**

**Scale of Pay : Rs 1400-40-1800-EB-50-2300 plus allowances (Revised)**

**Qualifications I-Essential: Educational:** High School or its equivalent oriental qualifications recognised by the University

**Technical.** Diploma in Unani Medicine or Sahayak Hakim recognised by the State Board University

**II-Desirable :** Three years experience in Dawasazi (Pharmacy) will be preferred

**Note :** The candidates having good experience in Dawasazi (Pharmacy) may be relaxed in suitable cases in respect of Technical qualifications

**28. Technical Assistant (Automobile Stores) (One Post) (Permanent) Central Automobile Workshop.**

**Scale of Pay : Rs. 1400-40-1800-EB-50-2300 plus allowances (Revised)**

**Qualifications : I-Essential . 1. B A / B Com./B.Sc Dip Engineering.**

2. Seven years experience of purchasing and accounting of Engg. stores, including office work in a Govt / Semi Govt. or commercial organisation.

**II-Desirable :** Knowledge to deal the Road Tax, Insurance and Fitness Taxes of vehicles etc

**Note :** Qualifications are relaxable on the basis of high experience in this field.

**29. Steno-Typist-Cum-Office Assistant (One post) (Temporary) Career Planning Centre, A.M.U Women's College.**

**Scale of Pay : Rs. 1400-40-1600-50-**

**2300-EB-60-2600 plus allowances. (Revised)**

**Qualifications . I-Essential :** At least Bachelor's Degree with speed of 100 w p m in English short-hand and 50 w.p.m. in English Typing.

**II-Desirable . (a)** Three years experience as Steno in a Commercial Educational Institution

**(b)** Experience of handling Electronic Tapewriter and Word Processor.

**(c)** Experience of handling Telex & PBX Machines

**30. Technical Assistant (Instrumentation) (One Post) University Polytechnic.**

**Scale of Pay : Rs. 1400-40-1800-EB-50-2300 plus allowances. (Revised)**

**Qualifications: Essential:** Post-Matric Diploma in Electrical Electronics with two years experience

**OR**

Trade certificate in Electrical Electronics with seven years experience in Institute Workshop/Faculty of repute.

**Note .** The eligible candidate will have to undergo a practical test

**31 Public Health Nurse, Community Medicine Deptt , J N.M C**

**Scale of Pay . Rs 1320-30-1560-EB-40-2040 plus allowances (Revised)**

**Qualifications . Essential :** (a) Higher Secondary or equivalent.

**(b)** Diploma in Public Health Nursing from a recognised Institution.

**Desirable :** B Sc (Public Health Nursing) or equivalent.

**32 Conservationist (One post) (Permanent) Sir Syed Academy**

**Scale of Pay . Rs 1400-40-1800-EB-50-2300 plus allowances (Revised)**

**Qualifications . I-Essential . 1 M Sc in Chemistry.**

2 One year Diploma from National Laboratory for conservation of Cultural properties located at Lucknow (Department of Government of India)

**OR**

Diploma from National Archives, Government of India, New Delhi.

**II-Desirable :** 1. Some experience of working in an Institution for preservation of cultural objects or MSS.

2. Knowledge of Urdu Persian.

**33 Micro-Photographer (One post) (Permanent) Sir Syed Academy**

**Scale of Pay : Rs 1400-40-1800-EB-50-2300 plus allowances (Revised)**

**Qualifications :** 1. M.Sc in Physics.  
2. One year Diploma in Photography from a recognised Institution or certificate in Photography with five years of experience of microfilming.

3. Knowledge of Urdu/Persian.

**34 Semi-Professionals (Consolidated) MA Library & other libraries.**

**Scale of Pay : Rs. 1320-30-1560-EB-40-2040 plus allowances (Revised)**

**Qualifications : I-Essential :** B.A./B.Sc / B Com with B. Lib. Sc or one year postgraduate Diploma in Library Science

**II-Desirable .** Ability to prepare catalogue cards by English/Urdu type-writing.

**35 Nuskhaband (One Post) (Permanent) A.K. Tibbiya College Hospital.**

**Scale of pay . Rs 1320-30-1560-EB-40-2040 plus allowances. (Revised)**

**Qualifications: I-Essential: Educational** High School or its equivalent oriental qualification recognised by the University

**Technical:** Diploma in Unani Medicine or Sahayak Hakim, recognised by the State/Board/University.

**II-Desirable :** Three years experience in Nuskhabandi, will be preferred.

**Note :** Those candidates who have applied in response to advertisement No 13 86-87 dated 18.9.86 and 22.86-87, dated 27-1-87 need not apply again. They will be considered on the basis of their previous applications.

**36 Senior Laboratory Assistant (Architecture) (One post) University Polytechnic**

**Scale of Pay Rs 1320-30-1560-EB-2040 plus allowances. (Revised)**

**Qualifications : I-Essential :** Diploma in Drafting & Designing (Architect/Civil) with at least five (5) years experience.

**OR**

Certificate in Draftsmanship (Architect, Civil) with at least 7 years experience.

**Note :** Eligible candidates will have to undergo a practical test.

**37. Lower Division Clerk (Records) (Permanent) Department of Anaesthesiology**

**Scale of Pay : Rs. 950-20-1150-EB-25-1500 plus allowances. (Revised)**

**Qualifications I-Essential :** (a) B.A./B.Sc /B.Com.

**(b)** Good knowledge of English typewriting with minimum speed of 40 w p.m.

**II-Destirable :** Minimum 3 years experience of record keeping.

**Note :** Eligible candidates will have to undergo a typing test before interview. Those who will qualify the typing test will be called for interview.

**38. Clerk (Records) Department of Biochemistry, J.N.M.C.**

**Scale of Pay :** Rs. 950-20-1150-EB-25-1500 plus allowances. (Revised)

**Qualifications :** I-Essential: B.A., B.Sc./B.Com

(a) Two years experience of working in the office of a Department engaged in teaching research in Biochemistry, Biology.

(b) Ability to type with minimum speed of 30 w.p.m. to be verified by typing test.

**39. Clerk (Records) (Permanent) J.N. Medical College Hospital**

**Scale of Pay :** Rs. 950-20-1150-EB-25-1500 plus allowances (Revised)

**Qualifications :** I-Essential : B.A./B.Sc./B.Com.

(a) Two years experience in collection and compilation of Medical data & interpretation.

(b) Ability to type with minimum speed of 30 w.p.m. to be verified by a typing test.

**40. Electrician-cum-Pump Operator (One post) (Permanent) Registrar's Office.**

**Scale of Pay :** Rs. 950-20-1150-EB-25-1500 plus allowances. (Revised)

**Qualifications :** (i) High School Jr. High School and I.T.I. Certificate in the trade of Fitter or Mechanic or Electrician.

(ii) Atleast five years practical experience in the operation and maintenance of electrically driven pumping plants and other installations in connection with tube-well and Sump-well.

He should be able to rectify the minor electrical and mechanical defects or faults.

**Note :** Qualifications, other than I.T.I. certificate, may be relaxed in suitable & exceptional case.

**Note :** The eligible candidates will have to undergo a practical test before interview.

Higher initial start may be given to candidates possessing exceptional qualifications and experience. Candidates interviewed may be paid contribution towards their T.A. equal to one single second class Railway fare only.

Prescribed application forms and instructions may be had from the Assistant Registrar (Selection Committees), Aligarh Muslim University, Aligarh on payment of Rs. 10/- for posts at Sl. No. 1 to 18 and Rs. 7/- for the remaining posts to be deposited in the Cash Section, Finance Office, Aligarh Muslim University or through an Indian Postal Order payable to the Finance Officer, Aligarh Muslim University, Aligarh personally or by sending a self-addressed stamped envelope of size of 9" X 4".

Last date for receipt of applications is 17.8.1987 (during office hours). Incomplete applications and those received late will not be considered.

**Jawed Usmani  
IAS  
REGISTRAR**

## **ROHILKHAND UNIVERSITY**

**BAREILLY**

### **ADMISSION NOTICE**

**SESSION 1987-88**

Applications are invited for admission to the following courses for the academic session 1987-88. Forms duly filled alongwith the attested copies of certificates/testimonials must reach the undersigned upto 16th August, 1987

**1. Faculty of Arts—Master degree in the following subjects—**

A—Ancient History & Culture.

B—Applied & Regional Economics.

**2. Faculty of Law—Master of Law (LL.M.)**

**3. Faculty of Life Science—Master degree the following subjects—**

1. Plant Science.

2. Animal Science

The admission forms alongwith prospectus can be had from the University Office on cash payment of Rs. 10 - only or from the Deputy Registrar (General) by registered post by sending a crossed Bank Draft, I.P.O. worth Rs. 16 - only drawn in favour of Finance Officer, Rohilkhand University, Bareilly payable at Bareilly.

Admission will be made in order of merit from amongst the candidates applied for admission in the respective departments according to the number of seats available. If interview is arranged for selecting suitable candidates, applicants shall be informed accordingly and no TA/DA will be paid by the University.

**B.S. Gupta**

**REGISTRAR**

## **BHOPAL UNIVERSITY**

**BHOPAL**

**Advertisement No. 1/87**

**No 2302/Estt/87**

**Dated : 16-7-87.**

Application on plain paper 8 (eight) copies are invited for the post of DEAN, COLLEGE DEVELOPMENT COUNCIL, in the pay scale of Rs. 1500-60-1800-100-2000-125/2-2500, so as to reach the Registrar on or before 10-8-1987.

Applications should be accompanied with crossed Indian Postal Order of Rs. 10/- in favour of Registrar, Bhopal University, Bhopal and attested copies of Marksheet/Certificate etc

**Minimum Qualification & Experience :** University Professor OR Post Graduate College Principal OR Class-I Officer of the University of 10 years standing. The first appointment shall be for 3 years and the incumbent may be re-appointed for another term of 3 years but he/she shall not continue beyond the age of 65 years.

No TA/DA will be admissible to the candidates if called for interview. The Selection Committee may consider the candidature of any eminent, suitable person in absentia.

**Note :** Candidates who have already applied previously in response to the Advt. No. 5/85 need not apply again.

**Dr. R.B. Malaviya  
REGISTRAR**

# UNIVERSITY OF DELHI

ESTAB/IV/110/87/

Dated the 13th July, 1987

Applications in the prescribed form are invited for the following posts :

Sl No.	Department	Post	No. of Vacancies	Special/Desirable Qualifications
1.	Arabic	Reader	One	—
2.	Chemistry	Professor	One	—
3.	Education	(i) Professor (ii) Lecturer (Teaching of English)	One One	(i) 3 years experience of teaching in a School or in a Training College (ii) Specialized qualifications in the teaching of English. Music as a subject at the Secondary level or at a teachers training level.
		(iii) Junior Teacher in Basic School	One	Music as a subject at the Secondary level or at a teachers training level.
4	Geology	(i) Reader (ii) Lecturer	One One	Structural Igneous and Metamorphic Petrology. Petrology, Geoexploration, Marine Geology, Geophysics and Economic Geology.
5.	History	(i) Professor (ii) Reader	One One	Medieval Indian History. Ancient Indian History
6.	Human Resource Development Cell	Research Associates	Two	—
7.	Modern European Languages	(i) Professor of Russian Literature & History (ii) Lecturer in Russian	One One	—
8.	Modern Indian Languages	Lecturer in Telugu	One	(i) Ancient Telugu Literature (ii) Sanskrit and experience of language teaching
9	Philosophy	(i) Professor (ii) Readers	*One *Two	Minimamsa (Out of these two Readers One position to be filled up by a traditional pandit with specialisation in Dharmashastra)
		(iii) Lecturer	*One	—
10	Zoology	(i) Professors (ii) Readers	Four Three	Cell Biology, Endocrinology, Entomology, Fish Biology, Ecology, Immunobiology. Animal Behaviour, Cell Physiology, Limnology, Animal Systematics, Neurobiology.

## SCALES OF PAY FOR THE POSTS ARE

Professor Rs. 1500-60-1800-100-2000-125, 2-2500

Reader Rs. 1200-50-1300-60-1900

Lecturer Rs. 700-40-1100-50-1600

Research Associate (A) Rs. 1400 - p.m. fixed  
(B) Rs. 1600 - p.m. -do-  
(C) Rs. 1800 - p.m. -do-  
(D) Rs. 2000 - p.m. -do-

Jr. Teacher Rs. 1200-30-1560-EB-40-2040 (Revised)

All posts except of Research Associate carry D.A., C.C.A. and H.R.A. etc. as admissible under the rules in force in the University from time to time.

\*For 5 years but likely to continue.

## Essential Qualifications for Professorship

An eminent Scholar with published work of high quality actively engaged in research, 10 years' experience of teaching and/or research. Experience of guiding research at doctoral level.

Or

An outstanding scholar with established reputation who has made significant contribution to knowledge.

## Readership

Good academic record with atleast second class Master's degree in a relevant subject with a doctoral degree or equivalent published work. Evidence of being actively engaged in (i) research, or (ii) innovation in teaching methods or (iii) production of teaching materials.

5 years experience of teaching in under-graduate/post graduate classes and/or post-doctoral research work with evidence of published work.

Note : Second class would mean at least 50% marks in the subject or equivalent grade.

## LECTURERSHIP : (Other than Lecturership in Russian and Education)

(a) A Doctorate degree or research work of an equally high standard; and

(b) Good academic record with at least second class (C in the seven point scale) Master's degree in a relevant subject from an Indian University or an equivalent degree from a Foreign University

Having regard to the need for developing inter-disciplinary programmes, the degree in (a) and (b) above may be in relevant subjects.

Provided that if the Selection Committee is of the view that the research work of a candidate as evident either from his thesis or from his published work is of very high standard, it may relax the requirement of at least second class in Master's degree examination in terms of level achieved at the said examination as prescribed in (b) above.

Provided further that if a candidate possessing a Doctor's degree or equivalent research work is not available or is not considered suitable, a person possessing good academic record (weightage being given to M. Phil or equivalent degree or research work of quality) may be appointed on the condition that he will have to obtain a Doctor's/M. Phil. degree or give evidence of research of high standard

Pre-revised.  
To be revised.

On the recommendation of the Selection Committee.

within ten years of his appointment failing which he will not be able to earn future increments until he fulfils these requirements.

#### Lecturership in Russian

(a) A Doctor's degree or research work of an equally high standard; and

(b) Good academic record with at least second class (C in the seven point scale) Master's degree or M. Phil degree from an Indian University or an equivalent degree from a foreign University. Having regard to the need for developing interdisciplinary programmes, the degrees in (a) and (b) above may be in relevant subjects.

Provided that if the Selection Committee is of the view that the research work of a candidate as evident either from his thesis or from his published work is of very high standard, it may relax any of the qualifications prescribed in (a) and (b) above.

Provided further that if a candidate possessing a Doctor's degree or equivalent research work is not available or is not considered suitable a person possessing a good academic record may be appointed on the condition that he will have to obtain a Doctor's M. Phil degree or give evidence of research work of equivalent high standard within 10 years of his appointment failing which he will not be able to earn future increments until he fulfils these requirements

#### Lecturership in Education

(a) A doctor's degree in education or research work of an equally high standard; and

(b) Good academic record with at least second class (C in the seven point scale) Master's degree in a relevant subject from an Indian University or an equivalent Degree from a foreign University.

Or

(a) A Doctor's degree in any University discipline or research work of an equally high standard; and

(b) Good academic record with an M. Phil degree in Education (which may be acquired while in service) from an Indian University or an equivalent degree from a foreign University.

Having regard to the need for developing interdisciplinary programmes, one of the degrees in (a) and (b) above

may be in relevant subjects, the other being in Education.

Provided that if the Selection Committee is of the view that the Research work of a candidate as evident either from his thesis or from his published work is of very high standard it may relax any of the qualifications prescribed in (b) above.

Provided further that if a candidate possessing a Doctor's degree or equivalent research work is not available or is not considered suitable a person possessing a good academic record (Weightage being given to M. Phil or equivalent degree or research work of quality) may be appointed on the condition that he will have to obtain a Doctor's M. Phil degree or give evidence of research work of equivalent high standard within ten years of his appointment failing which he will not be able to earn future increments until he fulfils these requirements.

#### Explanation

For determining "good academic record" the following criteria shall be adopted.

1 (i) A candidate holding a Ph.D. M. Phil. degree should possess atleast a second class Master's degree, or

(ii) A candidate without a Ph.D. M. Phil degree should possess a high second class Master's degree and second class in the Bachelor's degree, or

(iii) A candidate not possessing Ph D, M.Phil degree but possessing second class Master's degree should have obtained first class in the Bachelor's degree

2. Persons having secured at least 55% marks or more shall be deemed to have passed that examination in the high second class.

#### Research Associate

The candidates should have M.A., M. Com M B A or other equivalent degree with a high second class (Second class starts at 50%) In addition they should have at least two years' research experience as evidenced by published papers in standard journals.

The selected candidates will get fixed emoluments in the range of Rs 1400-2000 and the appointment will be initially for a period of 2 years which

is renewable up to a total tenure of 5 years.

#### Jr. Teacher (Basic School)

1. Hr. Secondary pass of a recognised Board/University with an elective subject in the required language at the Matric level.

2. 2 years teacher training certificate from the recognised institution.

Or

1. Intermediate or equivalent from the recognised Board/University with an elective subject in the required language at the Matric level.

2. One year Teacher's training certificate from a recognised Institution.

The prescribed application forms can be had from the Information Section of the University either personally or by sending a self-addressed envelope (size 113cm X 28 cm) with postage stamps worth Rs. 5 90 paise

The candidates will have to produce the original documents relating to their age, qualifications, experience etc. at the time of interview.

Applications (separate for each post) accompanied by attested copies of Degrees, other certificates, mark sheets, published research articles etc. should be addressed to the Registrar. The last date prescribed for receipt of applications 14-8-87.

**Note:** 1 It will be open to the University to consider the names of suitable candidates, who may not have applied. Relaxation of any of the qualifications may be made in exceptional cases, in respect of all the posts on the recommendations of the Selection Committee.

2 Canvassing in any form by or on behalf of the candidate will disqualify.

3. Candidates from outside Delhi when called for interview will be paid to and fro single second class rail fare

4. The University reserves the right not to fill up any of the vacancies advertised if the circumstances so warrant

Madan Mohan  
REGISTRAR